Historic, Archive Document

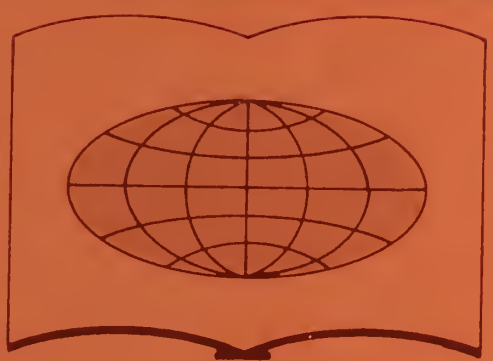
Do not assume content reflects current
scientific knowledge, policies, or practices.

SHOUT
SHARE
IT

241
43
ag 3

Pesticides
DOCUMENTATION
BULLETIN

U.S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY
JUL 9



Volume 4 Number 15
JULY 19, 1968

ONAL AGRICULTURAL LIBRARY · U.S. DEPARTMENT OF AGRICULTURE

Use Pesticides Safely

FOLLOW THE LABEL

U.S. DEPARTMENT OF AGRICULTURE

PESTICIDES DOCUMENTATION BULLETIN

A BI-WEEKLY PUBLICATION OF

U. S. DEPARTMENT OF AGRICULTURE

Volume 4 | July 19, 1968 | Number 15

OBJECTIVES AND SCOPE

The Pesticides Documentation Bulletin is compiled by the Pesticides Information Center, the first of its kind to be established within a national library, It is a bi-weekly index to the literature on pests and their control and the impact on the economy and man's total environment. The index includes literature on diseases, insects, nematodes, parasites, weeds, and other pests affecting plants, animals, man, our natural resources, and other values in man's environment. Literature on biological, chemical, cultural ecological, mechanical, and integrated methods of pest control will be included. Special emphasis is given to the literature on the toxicological, physiological and epidemiological aspects of pests and their control by chemical and nonchemical methods.

For broader coverage of literature on agriculture and related subjects, please consult the Bibliography of Agriculture, a monthly publication of the National Agricultural Library.

FORMAT

The Bulletin is a categorized bibliography, with citations arranged alphabetically by author under the following major subjects:

10 Entomology
20 Crop Protection
30 Livestock Protection
40 Commodity Protection
50 Environmental Contamination
55 Residues
60 Toxicology
65 Plant Physiology & Biochemistry
70 Chemistry
80 Engineering
90 Industry

Citations: Each citation consists of an accession number assigned serially with the last two digits representing the Bulletin's issue year, i.e. 3286-67. The citation number (minus the year) is used in all indices. Following the accession number is the full title of the article; all personal authors; an abbreviated journal title; volume, issue and inclusive page numbers; date of publication; language abbreviation, if other than English; and the National Agricultural Library's call number. Subject descriptors, patent or grant numbers, bibliographer's notes, and abstracts or extracts may follow each citation when appropriate.

Subject Index: Subject descriptors appear in the index followed by title arranged numerically by accession number. The Agricultural/Biological Vocabulary developed by the National Agricultural Library is used as a basic thesaurus of descriptors.

Biographical Index: Names of first authors are arranged alphabetically, followed by organizational affiliation and accession number.

Author Index: Names of personal authors are arranged alphabetically, followed by accession numbers of pertinent citations.

Organizational Index: Names of corporate authors or sponsoring organizations are arranged alphabetically followed by accession numbers of pertinent citations.

AVAILABILITY OF REFERENCES CITED

Search Requests

Each item appearing in the current format of the Bulletin is maintained in magnetic tape files which are fully searchable.

Search requests may be submitted to:

U.S. Department of Agriculture
National Agricultural Library
PESTICIDES INFORMATION CENTER
Room 4112 - Auditors Building
Washington, D.C. 20250

Loans

Most of the material in the National Agricultural Library collection may be borrowed by employees of the Department of Agriculture and by other libraries. In requesting loans, please include the Library call number found with the citation. Loan of periodicals is restricted to the Washington, D. C. area. Foreign statistical publications and rare books are loaned only by special arrangement.

Free Distribution

U.S.D.A. publications: Domestic requests for publications of the United States Department of Agriculture will be supplied free to libraries and other qualified agencies and organizations upon application to the United States Department of Agriculture, Office of Information, Washington D. C. 20250, as long as the supply lasts. Foreign institutions, organizations and agencies which issue publications may obtain USDA publications in exchange by writing to the United States Department of Agriculture, National Agricultural Library, Exchange Unit, Washington, D.C., 20250.

State Agricultural Experiment Station and Extension Service publications are available except where noted, and as long as the supply lasts, from the issuing station or service. The National Agricultural Library does not distribute them; however, reproductions are available at regular Library rates.

Reproduction

All articles listed may be obtained in microfilm or photoprint form from the United States Department of Agriculture, National Agricultural Library, Photoduplication Section, Washington, D. C., 20250. Copying charges for each periodical or book are:

MICROFILMS: $1.00 for each 30 pages or fraction copied from a single article or book.

PHOTOPRINTS: $1.00 for each 4 pages or fraction copied from a single article or book.

RUSH SERIVICE: Will be furnished upon payment of $1.00 additional for each order.

Payment must accompany the order. Cash, Library coupons, check or money order drawn to the National Agricultural Library, U.S.D.A., are acceptable. Payment for orders originating outside of the United States should be made by American bank, or by UNESCO book coupons. Superintendent of Documents coupons and requests to furnish photocopy to be paid from Superintendent of Documents Deposit funds cannot be honored. Credit may be extended only to Government agencies and institutions. Billing address should be indicated.

Library Coupons

National Agricultural Library coupons, valued at $1.00 each, may be purchased in any quantity.

For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 20402. $14.00 per year, domestic; $17.50 per year, foreign. Single copies vary in price.

Use of funds for printing this publication approved by the Director of the Bureau of the Budget (March 29, 1966).

PLEASE GIVE COMPLETE BIBLIOGRAPHIC INFORMATION AS IT APPEARS IN THIS PUBLICATION FOR EACH ITEM REQUESTED.

ACKNOWLEDGMENT

The Pesticides Information Center, National Agricultural Library, gratefully acknowledges the cooperation and assistance of the Department of Defense; Health, Education, and Welfare; and Interior; the Federal Committee on Pest Control, and state and industrial organizations in the development of the Center and preparation of this Bulletin. Special thanks are expressed to the Federal Committee on Pest Control for its suggestions and support. We hope the Bulletin will serve as an example of the effectiveness of interdepartmental cooperation and the speed with which effective services can be developed through a coordinated and cooperative interdepartmental effort.

TABLE OF CONTENTS

Items	Page
BIBLIOGRAPHY (Citations)	
10 ENTOMOLOGY	1
Systematics	1
Physiology and Biochemistry	1
Genetics	9
Medical Entomology	9
20 CROP PROTECTION	10
Diseases	10
Arthropods	21
Nematodes	23
Weeds	24
Other Pests	25
30 LIVESTOCK PROTECTION	25
Diseases	26
Arthropods	35
Parasites	36
40 COMMODITY PROTECTION	37
Storage Diseases	37
Arthropods	*
Rodents and Other Pests	*
Microbial Contamination	37
50 ENVIRONMENTAL CONTAMINATION	38
55 RESIDUES	39
60 **TOXI**COLOGY	42
65 PLANT PHYSIOLOGY & BIOCHEMISTRY	43
70 CHEMISTRY	45
80 ENGINEERING	47
90 INDUSTRY	48
Economics	48
Education	*
Regulations	48
SUBJECT INDEX	49
BIOGRAPHICAL INDEX	113
AUTHOR INDEX	117
ORGANIZATIONAL INDEX	123

*This issue does not contain citations under this category.

Note: Mention of a company name or proprietary product does not necessarily imply endorsement by the U. S. Department of Agriculture, NATIONAL AGRICULTURAL LIBRARY, PESTICIDES INFORMATION CENTER.

10 ENTOMOLOGY

Systematics

14800-68
DIPTERA FROM NEPAL. ANTHOMYIIDAE.
D M Ackland
Brit Mus (natur Hist) Entomol Bull Suppl 20(4):105-139
1967 420 B773
Anthomyiidae.
*Includes n. spp.

14801-68
THE COEXISTENCE OF INSECT PARASITES AND HOSTS IN LAROBATORY ECOSYSTEMS.
B AI-Hafidh
Entomol Soc Amer Ann 56(5):676-678, 3 REFS.
Sep 1963 420 EN82
Insect rearing, Parasitic insects, Trialeurodes.

14802-68
INTERESTING CAPTURES FROM THE TOUDON REGION (A-M). (FR)
G Alziar
Entomops 8:262-264
28 Apr 1967 QL461.E53
Lepidoptera.

14803-68
DYNAMICS OF POPULATIONS. II. FACTORS CONTROLLING POPULATION GROWTH AND POPULATION SIZE IN DROSOPHILA PSEUDOOBSCURA AND IN DROSOPHILA MELANOGASTER.
F J Ayala
Ecology 48(1)067-75, REF.
410 EC7
Drosophila melanogaster, Drosophila psendoobscura, Insect ecology.
Abstract

14804-68
MINED BUDS, A HIBERNATION SITE FOR SPRUCE BUDWORM.
H O Ratzer
J Econ Entomol 53(4)'684, BIBL.684-685
Aug 1960 421 J822
Balsams, Choristoneura, Hibernation, Picea.

14805-68
HYMENOPTERA FROM TURKEY SPHECIDAE, I. (FR)
J De Beaumont
Brit Mus (natur Hist) Entomol Bull Snppl 19(5):251-382
02 Jun 1967 420 B773
Sphecidae.
Includes n. spp.

14806-68
ESTIMATION OF DENDROCTONUS BREVICOMIS (COLEOPTERA-SCOLYTIDAE) MORTALITY CAUSED BY INSECT PREDATORS.
A A Berryman
Can Entomol 99(10):1009-1014
Oct 1967 421 C16
Predaceous insects, Scolytidae.

14807-68
CHEMICAL RELEASES OF SOCIAL BEHAVIOR-IV. THE HINDGUT AS THE SOURCE OF THE ODOR TRAIL PHEROMONE IN THE NEOTROPICAL ARMY ANT GENUS ECITON.
M S Blum C A Portocarrero
Entomol Soc Amer Ann 57(6)'793-794, 6 REFS.
Nov 1964 420 EN82
Eciton, Pheromone, Scent glands.

14808-68
SOME DIFFICULT TO DISTINGUISH SPECIES OF THE GENUS HYPER-ECTEINA SCRINER (DIPTERA, LARVAEVORIDAE). (RUS)
K B Borisova-Zinov:eva
Acta Ent Bohemoslov 63(6):420-439
1969 420 C33
Hyperecteina, Tachinidae.
Includes h. subcinerea n. sp., key.

14809-68
ECOLOGY OF AN OASIS.
J L Cloudsley-Thompson
Sci J 3(8):47-53, MAP
Aug 1967 Q1.S34
Arthropoda, Insect ecology, Oases.

14810-68
ON THE ECOLOGY OF ANTHOCORIS NEMORUM (L) (HEMIPTERA: HETEROPTERA).
E Collyer
Roy Entomol Soc London Proc Ser A Gen Entomol
42(7/9):107-118 REF
26 Sep 1967 420 L84PA
Heteroptera, Insect ecology, Insect rearing.

14811-68
THE DISTRIBUTION, LIFE HISTORY, AND ECONOMIC IMPORTANCE OF THE WINTER MOTH, OPEROPHTERA BRUMATA (L.) (LEPIDOPTERA, GEOMETRIDAE) IN NOVA SCOTIA.
F G Canning
Can Entomol 93(2):135-142, TABS.
Feb 1961 421 C16
Insect behavior, Insect dissemination, Insect morphology, Insect pests, Moths, Nova Scotia.

14812-68
STUDIES OF THE GYPONIDAE' A NEW GENUS- CHLORONANA (HOMOP-TERA' CICADELLIDAE).
D M Delong P H Freytag
Entomol Soc Amer Ann 57(4)'503-511, 3 REFS., 73 FIGS.
Jul 1964 420 EN82
Chloronana, Gyponinae, Insect taxonomy.

14813-68
SAMPLING STUDIES WITH AEDES VEXANS AND SOME OTHER WISCONSIN AEDES (DIPTERA: CULICIDAE).
R J Dicke
Entomol Soc Amer Ann 58(6)927-930, 8 REFS., 3 TABS.
Nov 1965 420 EN82
Aedes, Culicidae, Insect biology.

14814-68
PARASITES AND PREDATORS ASSOCIATED WITH FIVE SPECIES OF LEAF-MINING INSECTS IN BLACK LOCUST.
C K Dorsey
Entomol Soc Amer Ann 58(6):933-934, 5 REFS.
Nov 1965 420 EN82
Agromyzidae, Parasites, Robinia pseudoacacia.

14815-68
SPIDERS OF THE ARKANSAS COTTON FIELD.
H Exline R C Hunter
Entomol Soc Amer Ann 56(5):653-659, 8 REFS., 1 TAB.
Sep 1963 420 EN82
Cotton, Spiders.

14816-68
A STUDY OF THE CAPABILITY OF THE RICE WEEVILS SITOPHILUS SASAKII AND S. ORYZAE TO REPRODUCE PARTHENOGENETICALLY.
E H Floyd
Entomol Soc Amer Ann 58(4):565-567, 6 REFS.
Jul 1965 420 EN82
Parthenogenesis, Reproduction, Sitophilus.

14817-68
EFFECT OF TEMPERATURE, AERATION, PH, AND THE PRESENCE OF SOIL ON THE TOXICITY OF VARIOUS INSECTICIDES TO MOSQUITO LARVAE.
J R Gahan H R Ford
Fla Entomol 42(3):105-108, 4 REFS., 4 TABS.
Sep 1959 420 F662
Culicidae, Diazinon, Larvae, Malathion, Parathion.

14818-68
CORRELATION OF EUROPEAN CHAFER DEVELOPMENT WITH THE FLOWERING PERIOD OF COMMON PLANTS.
F L Gambrell
Entomol Soc Amer Ann 56(2):239-243, 1 REF.
Mar 1963 420 EN82
Amphimallon, Insect morphology.

14819-68
SUMMER MIGRATION OF THE ALFALFA WEEVIL, HYPERA POSTICA (COLEOPTERA: CURCULIONIDAE).
G G Gyrisco
Entomol Soc Amer Ann
Sep 1965 420 EN82
Curculionidae, Insect migration.

14820-68
ON THE LIFE HISTORY AND HABITS OF THE PALM WEEVIL, RHYNCHO-PHORUS PALMARUM.
E A C Hagley

10 14821-68

Entomol Soc Amer Ann 58(1)'22-28, 16 REFS., 3 TABS.
Jan 1965 42D EN82
Insect biology, Palmae, Rhynchophorus.

14821-68
A CLARIFICATION OF CERTAIN STRUCTURES IN THE THORACIC REGION OF OXYRHACHIS (HOMOPTERA'MEMBRACIDAE).
S G Hasenoehrl P P Cook Jr
Entomol Soc Amer Ann 58(2)'219-221, 4 REFS., 4 FIGS.
Mar 1965 42D EN82
Insect taxonomy, Oxyrhachis, Stictocephala, Thorax.

14822-68
SOIL FAUNA RESEARCH IN THE FOREST OF MAURES (VAR). THE DALE OF FOURNEL (COLEOPTERA). (FR)
P Herve
Entomops 8:249-254
28 Apr 1967 QL461.E53
Amauropidius, Coleoptera, Forest insects, Leptotyphlus dujardini, Soil insects.

14823-68
THE TRIVIAL NAME OF THE POTATO TUBERWORM (LEPIDOPTERA: GELECHIIDAE.
R W Hodges
Entomol Soc Wash Proc 69(1):52
Mar 1967 420 W27
Nomenclature, Phthorimaea operculella.

14824-68
NUTRITIONAL PEST CONTROL: THE 'SELF-PROTECTION' OF FOODSTUFFS AGAINST TRIBOLIUM CONFUSUM (COLEOPTERA: TENEBRIONIDAE) OFTEN PRESUMABLY THROUGH NUTRITIONAL FACTORS.
H L House A R Graham
Can Entomol 99(10):1082-1087
Oct 1967 421 C16
Biological control (insects), Insect nutrition, Tenebrionidae.

14825-68
AEDES (VERRALLINA) OF THE PAPUAN SUBREGION (DIPTERA: CULICIDAE).
Y M Huang
Diss Abstr Sect B 28(3):930B
Sep 1967 Z5055.U49D53
Aedes, Culicidae.

14826-68
THE GENUS LAELASPIS, WITH DESCRIPTIONS OF THREE NEW SPECIES (ACARINA: LAELAPTIDAE).
P E Hunter
Entomol Soc Amer Ann 54(5):672-683
Sep 1961 420 EN82
Insect identification, Laelaptidae, Laelaspis.

14827-68
SQUASH AND GOURD BEES OF THE GENUS XENOGLOSA _HYMENOPTERA, APOIDEA).
P D Hurd E G Linsley
Entomol Soc Amer Ann 60 _5), 988-1007,MAP REF
Sep 1967 420 EN82
Xenoglosa.
Abstract included.

14828-68
THE SUBGENUS PERSICARGAS, NEW SUBGENUS (IXODOIDEA, ARGASIDAE, ARGAS). I. A. (P.) ARBOREUS, AN EGYPTIAN PERSICUS-LIKE PARASITE OF WILD BEES, WITH A REDEFINITION OF THE SUBGENUS ARGAS.
M N Kaiser H Roogstraal G M Kohls
Entomol Soc Amer Ann 57(1)'60-69, 8 REFS., 40 FIGS.
Jan 1964 42D EN82
Argas, Birds, Persicargas.

14829-68
VIABILITY OF THE CHALCID PARASITE TETRASTICHUS PYRILLAE CRAWFORD FROM THE HOST PYRILLA PERPUSILLA WALKER EGG.
K Lal
Indian J Entomol 28 (3), 398-401
Sep 1966 420 IN23
Chalcidae, Parasitic insects, Pyrilla perpusilla, Tetrastichus pyrillae.

14830-68
THE HYMENOPTEROUS PARASITES (HYMENOPTERA: APHIDIIDAE ET APHELINIDAE) OF THE PEA APHID IN EASTERN NORTH AMERICA.
M Mackauer T Finlayson
Can Entomol 99(10):1051-1082
Oct 1967 421 C16
Aphidiidae, Hymenoptera, North America, Parasitism.

14831-68
GUIDE TO THE GEOMETRIDAE OF CANADA (LEPIDOPTERA). I. SUBFAMILY STERRHINAE.
W C McGuffin
Entomol Soc Can Mem 50:5-67 REF
1967 420 EN824
Geometridae, Sterrhinae.

14832-68
LIFE-HISTORY STUDIES OF AMBLYSEIUS LIMONICUS, WITH COMPARATIVE OBSERVATIONS ON AMBLYSEIDS HIBISCI (ACARINA' PHYTOSEIIDAE).
J A McMurtry G T Scriven
Entomol Soc Amer Ann 58(1)'106-111, 8 REFS., 4 TABS.
Nov 1965 42D EN82
Acarina, Amblyseius, Insect biology, Insect morphology.

14833-68
A NOTE ON HOPLITIS PRODUCTA (CRESS.) IN WISCONSIN (HYMENOPTERA: MEGACHILIDAE).
J T Medler
Can Entomol 93(7):571-573
Jul 1961 421 C16
Bees, Insect behavior, Insect rearing, Wisconsin.

14834-68
A NEW GENUS AND A NEW SPECIES OF PYRAUSTINAE (LEPIDOPTERA: PYRALIDAE).
E Munroe
Can Entomol 99(10):1104-1110
Oct 1967 421 C16
Insect identification, Pyralidae, Pyraustinae.

14835-68
MIGRATION OF THE ARMY CUTWORM, CHORIZAGROTIS AUXILIARIS _LEPIDOPTERA, NOCTUIDAE). I. EVIDENCE FOR A MIGRATION.
K P Pruess
Entomol Soc Amer Ann 60 _5), 910-920 REF
Sep 1967 420 EN82
Chorizagrotis auxiliaris, Insect migration.
Abstract included.

14836-68
RADAR OBSERVATIONS OF LOCUST SWARMS.
R C Rainey
Science 157(3784)'98-99
07 Jul 1967 470 SC12
Insect detection, Radar, Schistocerca gregaria.

14837-68
THE WINTER BIOLOGY OF CULEX TARSALIS (DIPTERA: CULICIDAE) IN KERN COUNTY, CALIFORNIA.
W C Reeves
Entomol Soc Amer Ann 56(3):314-323, 25 REFS., 4 TABS.
May 1963 420 EN82
Culex, Culicidae, Insect biology.

14838-68
CHARACTERS FOR SPECIFIC IDENTIFICATION OF FEMALES IN THE LEAFHOPPER GENUS EMPOASCA (HEMIPTERA:CICADELLIDAE).
H H Ross
Entomol Soc Amer Ann 58(5):620-623, 10 REFS., 7 FIGS.
Sep 1965 420 EN82
Cicadellidae, Insect identification.

14839-68
STUDIES ON ODONTOLOXOZUS LONGICORNIS (DIPTERA: NERIIDAE.) PART I. LIFE HISTORY AND DESCRIPTIONS OF IMMATURE STAGES.
R E Ryckman
Entomol Soc Amer Ann 56(4):454-469, 14 REFS., 4 TABS.
Jul 1963 42D EN82
Insect cultures, Insect morphology, Neriidae.

14840-68
THE MORPHOLOGY AND HIGHER CLASSIFICATION OF THE COREOIDEA (HEMIPTERA-HETEROPTERA). I-II.
C W Schaeffer
Entomol Soc Amer Ann 57(6)'670-684, 38 REFS., 12 FIGS.
Nov 1964 42D EN82
Coreoidea, Insect morphology.

14841-68
DANISH MYRMELEONTIDAE AND THEIR DISTRIBUTION. (DA)
K Secher
Flora Fauna 73(2):55-60, MAP, REF.
Jun 1967 410 F662
Myrmeleontidae, Zoogeography.
English abstract.

14842-68
DISPERSAL AND MIGRATION OF TEPA-STERILIZED MEXICAN FRUIT FLIES.
J G Shaw M Sanchez-Riviello L M Spishakoff P Trujillo
J Econ Entomol 60 (4)'992-994
15 Aug 1967 421 J822
Anastrepha ludens, Biological control (insects), Chemosterilants, Insect dissemination, Insect migration, Insect traps, Sterility, Tepa.
Abstract

14843-68
JAFYGIDAE OF SOUTH AMERICA. 4' THE GENUS AUSTRJAPYX AND OESCRIPTIONS OF NEW SPECIES.
L M Smith R H Gonzalez
Entomol Soc Amer Ann 57(2)'159-164, 3 REFS., 13 FIGS.
Mar 1964 420 EN82
Austrjapyx, New species, South America.

14844-68
PARASITES OF TBE RED-PINE SAWFLY, NEODIPRION NANULUS NANULUS (HYMENOPTERA: DIPRIONIDAE), IN NEW BRUNSWICK.
G R Underwood
Can Entomol 99(10):1114-1116
Oct 1967 421 C16
Canada, Diprionidae, Parasitism.

14845-68
SOME NOTES ON THE LIFE HISTORY OF PLEGA BANKSI (NEUROPTERA MANTISPIDAE).
F G Werner G D Butler Jr
Entomol Soc Amer Ann 58(1)'66-68, 4 REFS.
Jan 1965 420 EN82
Insect biology, Mantispidae, Plega.

14846-68
A NEW SPECIES OF LUTZOMYIA FROM SURINAM (DIPTERA, PSYCHODIOAE).
O J 8 Wijers J Huisenga
Bull Entomol Res 57(3)0395-397
Nov 1967 421 B87

14847-68
LABORATORY TESTS WITH SIXTY-FIVE COMPOUNDS AS REPELLENTS AGAINST BOUSEFLIES.
H G Wilson
Fla Entomol 42(4):175-177, 1 TAB.
Oec 1959 420 F662
Insect repellents, Musca domestica.

14848-68
THE IXODID TICKS OF TANZANIA. A STUDY OF THE ZOOGEOGRAPHY OF THE IXODIOAE OF AN EAST AFRICAN COUNTRY. QL458.A2Y2.
G H Yeoman J 8 Walker J P J Ross T M Docker
215 P. COMMONWEALTH INSTITUTE oF ENTOMOLOGY, LONOON
1967
Acarina, Ixodidae, Zoogeography.

Physiology and Biochemistry

14849-68
FINE STRUCTURE OF TBE INTEGUMENT OF THE TWO-SPOTTED SPIDER MITE, TETRANYCHUS TELARIUS (ACARINA:TETRANYCHIDAE).
J R Adams G E Cantwell
Entomol Soc Amer Ann 58(4):532-535, 10 REFS., 4 FIGS.
Jul 1965 420 EN82
Insect anatomy, Tetranychidae.

14850-68
NUCLEIC ACIDS EXTRACTED FROM THE VIRUS POLYHEORA OF THE SILKWORM, BOMBYX MORI (LINNAEUS).
K Aizawa S Iida
J Invertebrate Pathol 5(3):344-348
Sep 1963 421 J826
Bombyx mori, Nucleic acids, Polyhedroses.

14851-68
FEEOING 8EHAVIOR ANO HOST PREFERENCES OF SOME 8LACK FLIES (DIPTERA: SIMULIIDAE) IN WISCONSIN.
J R Anderson G R DeFoliart
Entomol Soc Amer Ann 54(5):716-729
Sep 1961 420 EN82
Insect behavior, Simuliidae, Wisconsin.

14852-68
INTE8FERENCE 8ETWEEN CYTOPLASMIC-POLYHEOROSIS VIRUSES OF THE SILKWORM, BOMBYX MORI (LINNAEUS), ANO OF THE PINE CATERPILLER, OENOROLIMUS SPECTABILIS (BUTLER).
H Aruga T Hukuhara S Fukuda Y Hashimoto
J Invertebrate Pathol 5(4):415-421
Oec 1963 421 J826
8ombyx mori, Dendrolimus spectabilis, Polyhedroses.

14853-68
A STUDY OF THE FLIGHT OF THE DOUGLAS-FIR BEETLE DENDROCTONUS PSEUOOTSUGAE HOPK. (COLEOPTERA: SCOLYTIOAE) III. FLIGHT CAPACITY.
M D Atkins
Can Entomol 93(6):467-474, TABS.
Jun 1961 421 C16
Insect behavior, Insect flight, Pseudotsuga menziesii.

14854-68
SEASONAL CHANGES IN THE ABUNDANCE OF CERTAIN APHIDS AND THEIR PREDATORS IN =GIZA..
A K Azab M F S Tawfik I I Ismail
Soc Entomol Egypte Bull 49:11-24
1966 420 EG9
Aphididae, Insect populations, Predaceous insects.

14855-68
THE PATHOGENICITY FOR HONEY-BEE LARVAE OF MICROORGANISMS ASSOCIATEO WITH EUROPEAN FOUL8ROOD.
L 8ailey
J Invertebrate Pathol 5(2):198-205
Jun 1963 421 J826
Apis mellifera, European foulbrood, Microorganisms.

14856-68
CRITICAL APPLICATION OF LOGISTIC PRINCIPLE ON THE LA8ORATORY POPULATION OF ANTHRENUS FLAVIPFS LEC.
B Banerjee
Indian J Entomol 28 (3), 359-364 REF
Sep 1966 420 IN23
Anthrenus flavipes, Insects, Laboratories, Population.

14857-68
PLASTIC POTS COMPAREO WITH CLAY POTS FOR REARING WHITE-FRINGED 8EETLE LARVAE.
F J Bartlett J A Mitchell Z A Shaw
J Econ Entomol 60(6):1767-1768
Oec 1967 421 J822
Insect cages, Insect rearing, Larvae, Plastics.

14858-68
FEEDING BEHAVIOR OF THE LARGE MILKWEED BUG, ONCOPELTUS FASCIATUS.
S D Beck
Entomol Soc Amer Ann
Mar 1963 420 EN82
Asclepias, Insect behavior, Oncopeltus.

14859-68
STIMULI PROVIDED 8Y COURTSHIP OF MALE DROSOPHILA MELANOGASTER.
H C 8ennet-Clark A W Ewing
Nature 215(5101), 669-671 REF
05 Aug 1967 472 N21
Drosophila melanogaster, Insect physiology, Sex behavior.

14860-68
FINE STRUCTURE OF SOME INSECT VIRUSES.
G H Bergold
J Invertebrate Pathol 5(1):111-128
Mar 1963 421 J826
Insect diseases, Polyhedroses.

14861-68
EFFECTS OF BORMONES ANO INJURY ON RNA SYNTHESIS IN SATURNIID MOTHS.
S J Berry H Oberlander H A Schneiderman
J Insect Physiol 13(10):1511-1537 REF
Oct 1967 421 J825
Diapause, Hormones, Injuries, Larvae, Moths, Ribonucleic acid, Saturniidae.
Abstract

14862-68
TRANSMISSION OF SOME INSECT VIRUSES WITH PARTICULAR REFERENCE TO OVARIAL TRANSMISSION AND ITS IMPORTANCE IN THE DEVELOPMENT OF EPIZOOTICS.
F T Bird

10 14863-68

J Invertebrate Pathol 3(4):352-380, 15 REFS., 11 TABS.
Dec 1961 421 J826
Disease transmission, Epizootic diseases, Insect diseases, Virus diseases (insects).

14863-68
REACTION THRESHOLDS AND SPECIFICITY OF AN ODOR RECEPTOR ON THE ANTENNA OF LOCUSTA. (GE)
J Hoeckh
Z Vergleichende Physiol 55(4)0378-406, REF.
1967 444.8 Z3
Antennae, Locusta migratoria, Olfactometers.
English summary.

14864-68
THE EFFECTIVENESS OF COMMERCIAL FORMULATIONS OF BACILLUS THURINGIENSIS BERLINER ON HOUSE-FLY LARVAE.
A L Borgatti G E Guyer
J Invertebrate Pathol 5(3):377-384, TABS.
Sep 1963 421 J826
Bacillus, Bacteria, Musca domestica.

14865-68
NOTES: ELECTRON MICROSCOPIC INVESTIGATION OF SACBROOD OF THE HONEY BEE.
J Brcak J Svoboda O Kralik
J Invertebrate Pathol 5(3):385-386
Sep 1963 421 J826
Apis mellifera, Electron microscopy, Sachrood.

14866-68
STUDIES ON THE GONADS OF SOME IMMATURE MOSQUITOES.
O P Breland
Entomol Soc Amer Ann 56(5):619-624, 13 REFS.
Sep 1963 420 EN82
Culicidae, Gonads, Insect morphology.

14867-68
TRANSMISSION OF BACTERIAL PATHOGENS BY THE OVIPOSITOR OF A HYMENOPTEROUS PARASITE.
G E Bucher
J Invertebrate Pathol 5(3):277-283
Sep 1963 421 JB26
Hymenoptera, Microorganisms, Parasitism.

14868-68
MOSQUITOES FEEDING ON A FROG.
L Burgess G H Hammond
Can Entomol 93(8):670-671
Aug 1961 421 C16
Feeding, Frogs, Insect behavior, Insect nutrition.

14869-68
RELATIONSHIP OF THE CROP CAPACITY TO THE DEPLETION OF THE FAT BODY AND EGG DEVELOPMENT IN THE CORN EARWORM, HELIOTHIS ZEA, AND THE FALL ARMYWORM, LAPHYGMA FRUGIPERDA (LEPIDOPTERA: NOCTUIDAE).
P S Callahan
Entomol Soc Amer Ann 54(6):819-827
Nov 1961 420 EN82
Heliothis zea, Insect physiology, Laphygma.

14870-68
INDUCTION OF SCINTILLATION IN THE FIREFLY.
A D Carlson
J Insect Physiol 13(7):1031-1038
Jul 1967 421 J825
Eserine, Insect behavior, Lampyridae.

14871-68
HISTOLOGY OF THE REPRODUCTIVE TRACTS AND TRANSMISSION OF SPERM IN THE CORN EARWORM, HELIOTHIS ZEA.
T Cascio
Entomol Soc Amer Ann 56(4):535-556, 22 REFS., 1 TAB.
Jul 1963 420 EN82
Heliothis zea, Insect histology, Reproduction.

14872-68
CONSTITUENTS OF DUFOUR'S GLAND IN MYRMECIA GULOSA.
G W K Cavill P J Williams
J Insect Physiol 13(7):1097-1103
Jul 1967 421 JB25
Formicidae, Insect behavior, Myrmecia gulosa, Poison glands.

14873-68
SOME HISTOLOGICAL ASPECTS OF THE BOLL WEEVIL.
D S Chadbourne
Entomol Soc Amer Ann 54(6):788-792
Nov 1961 420 EN82
Anthonomus grandis, Insect histology.

14874-68
THE OCCURRENCE OF ACETYLCHOLINE IN THE NERVOUS TISSUES OF AMERICAN COCKROACHES.
S C Chang C W Kearns
Entomol Soc Amer Ann 54(5):711-715
Sep 1961 420 EN82
Acetylcholine, Blattidae, Insect physiology.

14875-68
REARING AND BIOLOGY OF WOHLFAHRTIA VIGIL (DIPTERA: SARCOPHAGIDAE).
G R DePoliart
Entomol Soc Amer Ann 58(6):849-855, 9 REFS., 4 TABS., 4 FIGS.
Nov 1965 420 EN82
Insect biology, Insect rearing, Myiasis, Sarcophagidae, Wohlfahrtia.

14876-68
AN EVALUATION OF THE RATE OF REPRODUCTION OF THE TWO-SPOTTED SPIDER MITE REARED ON GIBBERELLIN-TREATED BEAN PLANTS.
J Eichmeier G Guyer
J Econ Entomol 53(4)'661-664, TABS.
Aug 1960 421 J822
Beans, Gibberellins, Insect rearing, Reproduction, Tetranychus.

14877-68
A PHOTOPERIODIC EFFECT ON THE DAILY SUSCEPTIBILITY OF THE HOUSE FLY TO TRICHLORFON.
A T Fernandez N M Randolph
J Econ Entomol 60(6):1633-1636 REF
Dec 1967 421 JB22
Insecticide resistant insects, Musca domestica, Photoperiodism, Trichlorfon.
Abstract

14878-68
REARING OF THREE SPOTTED ALFALFA APHID HYMENOPTEROUS PARASITES FOR MASS RELEASE.
G L Finney B Puttler L Dawson
J Econ Entomol 53(4)'655-659
Aug 1960 421 JB22
Alfalfa, Insect rearing, Therioaphis.

14879-68
GAMETOGENESIS IN THE HOUSE FLY, MUSCA DOMESTICA.
A French
Entomol Soc Amer Ann 58(5)'650-657, 22 REFS., 13 FIGS.
Sep 1965 420 EN82
Gametogenesis, Musca domestica, Reproductive organs.

14880-68
MATING STUDIES OF THE PINK BOLLWORM, PECTINOPHORA GOSSYPIELLA (LEPIDOPTERA: GELECHIIDAE), BASED ON PRESENCE OF SPERMATOPHORES.
B S Garcia H M Graham D F Martin
Entomol Soc Amer Ann 58(6):880-882, 7 REFS., 4 TABS.
Nov 1965 420 EN82
Pectinophora gossypiella, Reproduction, Spermatophores.

14881-68
SEX PHEROMONES OF NOCTUID MOTHS. VIII. ORIENTATION TO LIGHT BY PHEROMONE-STIMULATED MALES OF TRICHOPLUSIA NI (LEPIDOPTERA: NOCTUIDAE).
L K Gaston
Entomol Soc Amer Ann 58(6):833-836, 9 REFS., 3 FIGS.
Nov 1965 420 EN82
Light, Noctuidae, Pheromones, Sex attractants, Trichoplusia.

14882-68
SEX PHEROMONES OF NOCTOID MOTHS. VII. QUANTITATIVE ASPECTS OF THE PRODUCTION AND RELEASE OF PHEROMONE BY FEMALES OF TRICHOPLUSIA NI (LEPIDOPTERA:NOCTUIDAE).
L K Gaston
Entomol Soc Amer Ann 58(5):604-608, 10 REFS., 6 FIGS.
Sep 1965 420 EN82
Chromatography, Insect physiology, Noctuidae, Pheromones.

14883-68
FECUNDITY, LONGEVITY, AND TRANSINFECTIVITY OF CITRUS RED MITES (PANONYCHUS CITRI) INFECTED WITH A NONINCLUSION VIRUS.
J E Gilmore H Tashiro
J Invertebrate Pathol 8(3)'334-339, 7 REFS., 5 TABS.
Sep 1966 421 J826
Fertility, Insect diseases, Panonychus, Viruses.

14884-68
MATING FREQUENCY OF FEMALE PINK BOLLWORMS COLLECTED FROM LIGHT TRAPS.
P A Glick M T Ouye D F Martin
Entomol Soc Amer Ann 58(4):595-596, 4 REFS.
Jul 1965 420 EN82
Light traps, Pectinophora gossypiella, Reproduction.

14885-68
THE EFFECTIVENESS OF FORMALIN IN CONTROLLING JAUNDICE (NUCLEAR POLYHEDROSIS) OF THE SILKWORM IN POLAND.
K Golanski
J Invertebrate Pathol 3(1):11-14, 14 REFS.
Mar 1961 421 J826
Bombyx mori, Formaldehyde.

14886-68
LARVAL FEEDING BEHAVIOR OF THE CABBAGE LOOPER, TRICHOPLUSIA NI.
S Gothilf S D Beck
J Insect Physiol 13(7):1039-1053
Jul 1967 421 J825
Insect behavior, Insect nutrition, Trichoplusia.

14887-68
PROPAGATION OF BRACONID PARASITES OF THE PEA APHID.
J E Balfhill F E Featherston
J Econ Entomol 60(6):1756
Dec 1967 421 J822
Acyrthosiphon pisum, Alfalfa, Aphidius smithi, Greenhouses, Parasitism.

14B88-68
FUMIGANT TOXICITY OF 1,2,3-TRIBROMOPROPENE, ETHYLENEIMINE, CROTYL BROMIDE AND CARBON TETRACHLORIDE TO STORED-PRODUCT INSECTS.
P K Harein R L Soles
J Sci Food Agr 15(10)'II-220-5
Oct 1964 382 SO12
Attapenus, Carbon tetrachloride, Crotyl bromide, Ethylenimine, Lasioperma, Oryzaephilus, Tribolium, Tribromopropene, 1,2,3-.

14B89-68
A NONINCLUSION VIRUS OF GONOMETA PODOCARPI (LEPIDOPTERA' LASIOCAMPIDAE).
K A Harrap J F Longworth T W Tinsley K W Brown
J Invertebrate Pathol 8(2)'270-272
421 JB26
Gonometa, Insect diseases.

14890-68
ATTRACTION OF MELON FLIES TO LURES ON FOLIAGE OR CANE FIBERS AT VARIOUS HEIGHTS.
W G Hart M S Fujimoto D Kamakahi E J Harris
J Econ Entomol 60(4):1139-1142
15 Aug 1967 421 J822
Aerial dusting, Attractants, Biological control (insects), Cue-lure, Dacus cucurbitae, Fenthion, Guavas, Insect traps.
Abstract

14891-68
INHIBITION OF HOUSEFLY ACETYLCHOLINESTERASE BY CARBAMATES.
K Hellenbrand
J Agr Food Chem 15(5):825-829
Sep 1967 381 JB223
Acetylcholinesterases, Carbamates, Insect metabolism, Insecticides, Musca domestica.
Abstract

14892-68
ALKALINE PHOSPHOMONOESTERASE ACTIVITY IN INSECTS. 2.ACTIVITY IN VARIOUS CELL FRACTIONS FROM THE BLOW FLY PHORMIA REGINA.
E Hodgeson S S Kumar
Entomol Soc Amer Ann 57(5)'613-617, 29 REFS.
Sep 1964 420 EN82
Alkaline phosphomonoesterase, Phormia.

14893-68
AN INVESTIGATION OF THE HOUSEFLY HEARTBEAT THROUGH TRANSECTION EXPERIMENTS.
B Holcomb
Entomol Soc Amer Ann 58(5):608-611, 7 REFS., 4 TABS.
Sep 1965 420 EN82
Heart rate, Musca domestica.

14B94-68
METHODS FOR STAINING CAPSULAR VIROS INCLOSION BODIES TYPICAL OF GRANULOSES OF INSECTS.
A Huger
J Invertebrate Pathol 3(3):338-341
Sep 1961 421 J826
Granuloses, Inclusion bodies, Staining, Viruses.

14895-68
SENSITIVITY SPECTRUM OF BACILLOS THURINGIENSIS VAR. THORINGIENSIS BERLINER TO ANTIBIOTICS, SULFONAMIDES, AND OTHER SOBSTANCES.
C M Ignoffo
J Invertebrate Pathol 5(3):395-397
Sep 1963 421 JB26
Antibiotics, Microorganisms, Sulfonamides.

14896-68
DISTRIBUTION AND FATE OF 4-C14 CHOLESTEROL IN THE ADULT MALE AMERICAN COCKROACH.
S Ishii J N Kaplanis W E Robbins
Entomol Soc Amer Ann 56(1)'115-119, 14 REFS., 5 TABS.
Jan 1963 420 EN82
Cholesterol, Periplaneta, Radioactive tracers.

14B97-68
THE SKELETOMOSCULAR MECHANISM OF THE SO-CALLED ANAL LEGS IN THE CENTIPEDE SCOLOPENDRA AMAZONICA (SCOLOPENDRIDAE).
B S Jangi
Entomol Soc Amer Ann 54(6):861-869
Nov 1961 420 EN82
Chilopoda, Insect anatomy, Scolopendra amazonica.

14898-68
LIFE HISTORY OF THE MONTEREY PINE NEEDLE MINER, ARGYRESTHIA PILATELLA (LEPIDOPTERA' YPONOMEUTIDAE).
E Jessen
Entomol Soc Amer Ann
57(3)'332-341, 14 REFS., 3 TABS., 19 FIGS.
May 1964 420 EN82
Argyresthia, Insect biology, Monterey-pine needle miner.

14B99-6B
THE REARING OF PHLEBOTOMUS SANDFLIES (DIPTERA: PSYCHODIDAE) II. DEVELOPMENT AND BEHAVIOR OF PANAMANIAN SANDFLIES IN LABORATORY CULTURE.
P T Johnson M Bertig
Entomol Soc Amer Ann 54(6):764-776
Nov 1961 420 EN82
Insect behavior, Insect morphology, Insect rearing, Phlebotomus.

14900-68
THE EFFECTS OF PHOTOPERIOD AND TEMPERATURE ON THE INDUCTION OF DIAPAUSE IN AEDES TRISERIATUS (SAY).
K D Kappus C E Venard
J Insect Physiol 13(7):1007-1019
Jul 1967 421 J825
Aedes, Culicidae, Insect morphology.

14901-68
LONGEVITY OF THE FIRE BLIGHT ORGANISM, ERWINIA AMYLOVORA ON PEAR TREES IN THE GREENHOUSE AS DEMONSTRATED BY INFECTION AFTER SANDBLAST INJURY.
H L Keil B C Smale R A Wilson
Phytopathology 54(7):747
Jul 1964 464.8 P56
Fire blight (pears), Insect pests, Pears, Phytopathology, Plant diseases, Tree diseases.

14902-6B
CANDLING AND SIGHTING TECHNIQUES USED IN LASER INVESTIGATIONS OF THE EUROPEAN PINE SAWFLY, NEODIPRION SERTIFER (HYMENOPTERA: DIPRIONIDAE).
R W Kohlynyk
Can Entomol 99(6):670-672
Jun 1967 421 C16
Diprionidae, Lasers, Neodiprion.

14903-6B
DEMONSTRATION OF NUCLEAR POLYHEDROSIS IN BOMBYX MORI (LINNAEUS) BY FLUORESCENT ANTIBODY TECHNIQUE.
J Krywienczyk
J Invertebrate Pathol 5(3):309-317, BIBL. 316-317.
Sep 1963 421 J826
Bombyx mori, Fluorescent antibody technic, Polyhedroses.

14904-68
THE EFFECTS OF SAMPLING SITES ON NOSEMA DETERMINATION.
J C M L'Arrivee
J Invertebrate Pathol 5(3):349-355
Sep 1963 421 J826
Apis mellifera, Nosema disease.

1D 14905-6B

14905-68
THE SUSCEPTIBILITY OF HONEY BEES OF DIFFERENT AGES TO INFESTATION BY ACARAPIS WOODI (RENNIE).
D C Lee
J Invertebrate Pathol 5(1):11-15
Mar 1963 421 JB26
Acarapis, Apis mellifera, Mites, Parasitism.

14906-68
LA LUTTE CHIMIQUE CONTRE LES INSECTS NUISIBLES. (CHEMICAL CONTROL OF INSECT PESTS). ED. 3. SB951.L5. (FR)
J Lhoste
399 P. IMPRIMERIES RULLIERE-LIRECCIO, AVIGNON, FRANCE
1967
Attractants, Chemosterilants, Humans, Insect pests, Insect repellents, Insecticides, Integrated control (insects), Livestock, Medical entomology, Plant pest control, Toxicology, Wildlife.

14907-68
THE NERVOUS SYSTEM OF CERTAIN ABDOMINAL SEGMENTS AND THE INNERVATION OF THE MALE REPRODUCTIVE SYSTEM AND GENITALIA OF HYALOPHORA CECROPIA. (LEPIDOPTERA: SATURNIIDAE).
J L Libby
Entomol Soc Amer Ann 54(6):BB7-B96
Nov 1961 420 ENB2
Insect anatomy, Nervous system, Reproduction.

1490B-68
NEW TECHNIQUE FOR PREPARATION AND STUDY OF MOTH FLIES. (POR)
M C De Linero M
Rev Brasil Biol 27(1):47-4B
May 1967 442.B R326
Diptera, Insect taxonomy, Psychodidae.
Abstract

14909-6B
THE IMPORTANCE OF LOCOMOTOR ACTIVITY IN CIRCADIAN SYSTEMS. (GE
M Lohmann
Z Vergleichende Physiol 55(4):3D7-332, REF.
1967 444.8 Z3
Diurnal rhythm, Leucophaea, Locomotion.
English summary.

1491D-6B
METHODS FOR STUDYING AGGREGATION AND FEEDING BEHAVIOR OF THE CONFUSED FLOUR BEETLE, TRIBOLIUM CONFUSUM (COLEOPTERA' TENEBRIONIDAE).
S R Loschiavo
Entomol Soc Amer Ann 5B(3)'3B3-3BB, 20 REFS., 5 FIGS.
May 1965 420 EN82
Insect nutrition, Sucrose, Tribolium.

14911-6B
THE MECHANISMS OF PATHOGENICITY OF PSEUDOMONAS AERUGINOSA (SCHROETER) MIGULA. I. THE PATHOGENICITY OF STRAIN N-06 FOR LARVAE OF THE GREATER WAX MOTH, GALLERIA MELLONELLA (LINNAEUS).
O Lysenko
J Invertebrate Pathol 5(1):7B-B2
Mar 1963 421 JB26
Galleria, Insect diseases, Pseudomonas aeruginosa.

14912-68
THE INFLUENCE OF SPRAY PROGRAMS ON THE FAUNA OF APPLE ORCHARDS IN NOVA SCOTIA. XII. SECOND SUPPLEMENT TO VII. EFFECTS ON BENEFICIAL ARTHROPODS.
A W MacPhee K H Sanford
Can Entomol 93(8):671-673
Aug 1961 421 C16
Apples, Beneficial insects, Insecticidal aerosols, Spraying.

14913-6B
PHOTOPERIOD EFFECTS IN PIERIS RAPAE.
A Mayer C F Cohen
Entomol Soc Amer Ann 56(3):292-294, 10 REFS., 5 TABS.
May 1963 42D EN82
Insect rearing, Photoperiodism, Pieris.

14914-6B
CHANGES IN HAEMOLYMPH LIPOPROTEINS DURING LOCUST FLIGHT.
R J Mayer D J Candy
Nature 215(5104), 9B7
26 Aug 1967 472 N21
Acrididae, Blood, Cicadidae, Insect flight, Lipids, Proteins.

14915-68
CHEMICALS TESTED AS SPACE REPELLENTS FOR YELLOW-FEVER MOSQUITOES. II. CARBANILATES, BENZAMIDES, ALIPHATIC AMIDES, AND IMIDES.
T P McGovern M Beroza H Gouck
J Econ Entomol 60(6):1591-1594
Dec 1967 421 JB22
Aedes aegypti, Carbanilates, Chemical control (insects), Chemicals, Imides, Insect repellents.
Abstract:
of 293 compounds tested, 4 carbanilates, 2 benzamides, and 1 acetamide gave more than 100 days of protection. n, N-Dipropyl 2-(p-methoxbenzyl) oxy)acetamide is the most effective space repellent against yellow-fever mosquitoes. it gave 266 days protection.

14916-68
THE EFFECTS OF PHOTOPERIOD, TEMPERATURE, AND FOOD SUPPLY ON RATE OF DEVELOPMENT AND DIAPAUSE IN COCCINELLA NOVEMNOTATA.
R D McMullen
Can Entomol 99(6):57B-5B6
Jun 1967 421 C16
Aphididae, Coccinella, Insect morphology.

14917-6B
TIME MEMORY OF BEES UNDER THE INFLUENCE OF NARCOSIS AND OF SOCIAL PACEMAKING SIGNALS (ZEITGEBER). (GE)
I Medugorac M Lindauer
Z Vergleichende Physiol 55(4):45D-474, REF.
1967 444.B Z3
Bees, Memory, Narcosis.
English summary.

1491B-6B
METABOLISM OF MALATHION IN DESERT LOCUST. I. ACTIVATION OF MALATAION INTO AN ANTICHOLINESTERASE.
K N Mehrotra S Lal
Indian J Entomol 29(1):44-47 REF
Mar 1967 420 IN23
Cholinesterases, Insect metabolism, Malathion, Schistocerca gregaria.
Abstract

14919-6B
INSECTICIDAL AND NATUALISTIC CONTROL CHIRONOMID LARVAE IN LAKE DALWIGK, VALLEJO, CALIFORNIA.
E G Mezger
Calif Mosquito Contr Ass Proc Pap 35:125-12B REF
1967 42B C763
Aquatic plants, Chemical control (insects), Chironomidae, Fenthion, Fish, Insecticides, Malathion, Natural control (insects), Saline water.
Abstract:
application of malathion and fenthion granules for midge suppression gave effective control. when malathion was used considerable mortality was observed on mosquito fish notonectids, corixids and mosquito fish. no appreciable mortality was observed on the fish populations when fenthion was used. carp were very efficient in snppressing midge larvae.

14920-6B
SUSCEPTIBILITY OF MOSQUITOES TO SILICA GEL INSECTICIDES.
D W Micks
J Econ Entomol 53(5)'915-91B, 2 REFS.
Oct 1960 421 JB22
Aedes aegypti, Anopheles, Culex, DDT, Insecticide resistant insects.

14921-6B
SIMPLE SCREENING TEST FOR SYSTEMIC APHICIDES.
T E Mittler J T Pennell
J Sci Food Agr 15(10)'II-1B7-B
Oct 1964 3B2 S012
Aphididae, Biological assay, Insecticides, Toxicology.

14922-6B
STEROL STORAGE AND REPORDUCTION IN THE HOUSE FLY.
R E Monroe J N Kaplanis W E Robbins
Entomol Soc Amer Ann 54(4):537-539
Jul 1961 420 ENB2
Insect physiology, Musca domestica, Reproduction, Sterols.

14923-6B
THE FATE OF DIETARY H3-BETA-SITOSTEROL IN THE ADULT HOUSE FLY.
R E Monroe W E Robbins S J Louloudes
Entomol Soc Amer Ann 56(2):19B-2D1, 18 REFS., 7 TABS.
Mar 1963 420 ENB2

Beta-sitosterol, Insect physiology, Musca domestica.

14924-68
MICROORGANISMS FROM THE MID-GUT OF THE LARVA OF TENEBRIO OBSCURUS FABRICIUS.
J Moore G A Wistreich
J Invertebrate Pathol 3(4):399-402
Dec 1961 421 J826
Corynebacterium, Gastrointestinal system, Streptococcus, Tenebrio obscurus.

14925-68
TEGMINAL AMPLIFIERS AND SPECTRUM CONSISTENCIES IN CONOCEPHALUS NIGROPLEURUM (BRUNER), TETTIGONIIDAE.
G K Morris R E Pipher
J Insect Physiol 13(7):1075-1085
Jul 1967 421 J825
Conocephalus nigropleurum, Insect biology, Tettigoniidae.

14926-68
EFFECT ON ADULT EMERGENCE OF WHOLE AND PARTIAL X-IRRADIATION OF PUPAE OF THE HOUSEFLY, MUSCA DOMESTICA NEBULO.
K K Nair G Bhaskaran P Sivasubramanian
Can Entomol 99(6):597-598
Jun 1967 421 C16
Musca domestica, Pupae, X-rays.

14927-68
LARVAL DESCRIPTIONS OF TWO SPECIES OF PANORPA (MECOPTERA: PANORPIDAE), WITH NOTES ON THEIR BIOLOGY.
H H Neunzig
Entomol Soc Amer Ann 58(6):843-849, 10 REFS., 16 FIGS.
Nov 1965 420 EN82
Insect biology, Larvae, Panorpa.

14928-68
OBSERVATIONS ON THE EFFECT OF NEMATODES ON IPS CONFUSUS (LECONTE) AND OTHER BARK BEETLES.
W B Nickle
J Invertebrate Pathol 5(3):386-389
Sep 1963 421 J826
Ips, Nematodes, Scolytidae.

14929-68
ESTERASES OF CRYSTALLIFEROUS BACTERIA PATHOGENIC FOR INSECTS: EPIZOOTIOLOGICAL APPLICATIONS.
J B Norris H D Burges
J Invertebrate Pathol 5(4):460-472
Dec 1963 421 J826
Bacteria, Biological control (insects), Esterases, Lepidoptera.

14930-68
THE EFFECT OF APHOLATE AND THIOTEPA ON NUCLEIC ACID SYNTHESIS AND NUCLEOTIDE RATIOS IN HOUSEFLY EGGS.
R B Painter W W Kilgore
J Insect Physiol 13(7):1105-1118
Jul 1967 421 J825
Apholate, Insect eggs, Musca domestica, Nucleic acids.

14931-68
BEHAVIOUR AND RANDOM MATING.
P A Parsons
Experientia 23(7), 585-586. REF.
15 Jul 1967 475 EX7
Genetics, Sex behavior.

14932-68
EFFECTS OF CARBON DIOXIDE ANESTHESIA ON THE HOUSE CRICKET, ACHETA DOMESTICUS (ORTHOPTERA: GRYLLIDAE).
R L Patton
Entomol Soc Amer Ann 58(6):828-832, 14 REFS., 3 FIGS.
Nov 1965 420 EN82
Acheta, Anesthesia, Carbon dioxide, Gryllidae.

14933-68
PRELIMINARY OBSERVATIONS ON THE INCIDENCE AND BIOLOGY OF A MERMITHID NEMATODE OF AEDES SOLLICITANS IN LOUISIANA. (ABSTRACT).
J J Petersen H C Chapman D R Woodard
Calif Mosquito Contr Ass Proc Pap 35:95
1967 428 C763
Aedes sollicitans, Insect biology, Insect eggs, Insect mortality, Nematodes, Parasitism.

14934-68
LYSOZYME-LIKE ACTION OF ENZYMES FROM THE COCKROACH PERIPLANETA AMERICANA AND FROM SOME OTHER SOURCES. (GE)
R F Powning H Irzykiewicz
J Insect Physiol 13(9):1293-1299 REF
Sep 1967 421 J825
Beans, Cell wall, Enzymes, Insect physiology, Muramidase, Periplaneta americana.
Abstract

14935-68
PATHOGENICITY OF DIFFERENT STRAINS OF ENTOMOPHTHORA CORONATA (COSTANTIN) KEVORKIAN FOR LARVAE OF THE GREATER WAX MOTH.
S Prasertphon
J Invertebrate Pathol 5(2):174-181
Jun 1963 421 J826
Entomogenous fungi, Entomophthora coronata, Galleria.

14936-68
LIFE HISTORIES AND HABITS OF TWO SPECIES OF PHILODROMUS (ARANEIDA: THOMISIDAE) IN ONTARIO.
W L Putman
Can Entomol 99(6):622-631
Jun 1967 421 C16
Araneidas, Insect behavior, Philodromus, Spiders, Thomisidae.

14937-68
NECTAR OF PEACH LEAF GLANDS AS INSECT FOOD.
Wm L Putman
Can Entomol 95(1):108-109
Jan 1963 421 C16
Insect nutrition, Nectar, Peaches.

14938-68
ENERGY SOURCES DURING EMBRYOGENESIS OF THE YELLOW MEALWORM, TENEBRIO MOLITOR.
L J Ramazzotto
Entomol Soc Amer Ann 58(4):543-546, 20 REFS.
Jul 1965 420 EN82
Embryology, Glycogen, Insect morphology, Tenebrio.

14939-6R
NOTE: ELIMINATION OF MICROSPORIDIOSIS IN LABORATORY-REARED EUROPEAN CORN BORERS BY THE USE OF HEAT.
E S Raun
J Invertebrate Pathol 3(4):446-448
Dec 1961 421 J826
Biological control (insects), Heat, Insect eggs, Parasitism, Pyrausta nubilalis.

14940-68
BACTERIAL PATHOGENS IN IOWA CORN INSECTS.
E S Raun D L Brooks
J Invertebrate Pathol 5(1):66-71
Mar 1963 421 J826
Bacteria, Heliothis zea, Insect diseases.

14941-6R
THE EFFECT OF CIRCADIAN RHYTHM ON THE DEVELOPMENT OF DROSOPHILA. (GE)
L Rensing R Hardeland
J Insect Physiol 13(10):1547-1568
Oct 1967 421 JR25
Benzamide, Diurnal rhythm, Drosophila, Insect eggs, Insect morphology, Larvae.
Abstract

14942-68
THE SUBMARGINAL CUTICLE OF THE MAYFLY CALLIBAETIS SP. (EPHEMEROPTERA).
A G Richards
Entomol Soc Amer Ann 56(4):418-426, 21 REFS., 1 TAB.
Jul 1963 420 EN82
Callibaetis, Ephemeroptera, Metamorphosis.

14943-68
SOME PROBLEMS ASSOCIATED WITH WEIGHING APHIDS THAT HAVE FED AFTER STARVING, AS A METHOD OF MEASURING INTAKE OF PLANT SAP.
A G Robinson
Can Entomol 93(2):156-160, BIBL. 160
Feb 1961 421 C16
Feeding, Insect nutrition, Sap, Starvation.

14944-68
A TERGAL ABNORMALITY IN THE GERMAN COCKROACH, BLATELLA GERMANICA (L.).
M H Ross D G Cochran
Entomol Soc Amer Ann 54(5):749-750
Sep 1961 420 EN82
Blattella germanica, Insect abnormalities.

10 14945-68

14945-68
DESCRIPTIONS OF LARVAL AND PUPAL STAGES OF FOUR LEPIDOPTEROUS RICE BORERS IN MALAYSIAN BORNEO (SARAWAK).
G H L Rothschild
Bull Entomol Res 57(3):343-352 REF.
Nov 1967 421 B87
Chilo suppressalis, Rice, Sesamia inferens, Tryporyza incertulas.

14946-68
SEXING OF MEXICAN FRUIT FLIES.
M Sanchez-riviello J G Shaw
J Econ Entomol 60(6):1759-1760
Dec 1967 421 J822
Anastrepha ludens, Insect control, Sex determination.

14947-68
NEMATODE PARASITES AND ASSOCIATES OF THE SMALLER EUROPEAN ELM BARK BEETLE, SCOLYTUS MULTISTRIATUS (MARSHAM).
J L Saunders D M Norris Jr
Entomol Soc Amer Ann 54(6):792-798
Nov 1961 420 EN82
Insect rearing, Nematodes, Parasitism, Scolytus.

14948-68
STUDIES ON FINE-PARTICLE, COARSE-PARTICLE, AND CONCENTRATED AEROSOLS.
M S Schechter W N Sullivan A H Yeomans
J Econ Entomol 53(5):908-914, 19 REFS., 6 TABS.
Oct 1960 421 J822
Allethrin, DDT, Insecticidal aerosols, Musca domestica, Particle size determination, Pyrethrum.

14949-68
TRANSMISSION OF VIRUS Y BY INSTARS OF MYZUS PERSICAE (HOMOPTERA: APHIDAE).
J T Schulz
Entomol Soc Amer Ann 56(3):334-336, 3 REFS., 2 TABS.
May 1963 420 EN82
Myzus, Virus y (potatoes).

14950-68
BIOTIC POTENTIAL OF PHYTOSEIID MITES FED ON VIRUS-INFECTED CITRUS RED MITES.
J G Shaw C Moffitt G T Scriven
J Econ Entomol 60(6):1751-1752
Dec 1967 421 J822
Amblyseius hibisci, Amblyseius limonicus, Insect mortality, Panonychus citri, Predaceous insects, Virus diseases (insects).

14951-68
A COMPARISON OF THE DEVELOPMENTAL RATES OF ONE- AND TWO-YEAR CYCLE SPRUCE BUDWORM.
R F Shepherd
Can Entomol 93(9):764-771
Sep 1961 421 C16
Insect adaptation, Insect genetics, Insect morphology, Insect temperature, Natural control (insects), Picea.

14952-68
NOTES: EFFECT OF CERTAIN CARCINOGENIC 2-FLUORENAMINE DERIVATIVES ON LARVAE OF THE HOUSE FLY, MUSCA DOMESTICA LINNAEUS.
T J Shortino G E Cantwell W E Robbins
J Invertebrate Pathol 5(4):489-492
Dec 1963 421 J826
Fluorenamine, Larvae, Musca domestica.

14953-68
PIGMENT-PRODUCING VARIANTS OF BACILLDS THURINGIENSIS BERLINER FROM THE SILKWORM.
O I Shvetsova E R Zurahova
Microbiology 35 (4), 613-617
Jul 1966 448.3 M582AE
Bacillus thuringiensis, Bombyx mori, Galleria mellonella, Pigmentation, Tutovyi-3.

14954-68
SEX ATTRACTANT OF THE BLACK CARPET BEETLE.
A M Silverstein J O Rodin W E Burkholder J E Gorman
Science 157(3784):85-87
07 Jul 1967 470 SC12
Attagenus megatoma, Sex attractants, Tetradecadienoic acid, trans-3,cis-5-.

14955-68
OBSERVATIONS ON ODIOPORUS LONGICOLLIS (COLEOPTERA, CURCULIONIDAE) IN KATHMANDU VALLEY AND ITS SUBURBS.
S S Singh
Indian J Entomol 28 (3), 410
Sep 1966 420 IN23
Insect biology, Musa paradisica, Odioporus longicollis.

14956-68
ADAPTION OF A NUCLEAR-POLYHEDROSIS VIRUS OF TRICHIOCAMPUS VIMINALIS (FALLEN) TO LARVAE OF TRICHIOCAMPUS IRREGDLATIS (DYAR).
W A Smirnoff
J Invertebrate Pathol 5(1):104-110
Mar 1963 421 J826
Cimbicidae, Polyhedroses, Trichiocampus irregularis.

14957-68
EFFECT OF UREA ON THE FORMATION OF PARASPORAL INCLUSIONS IN SPECIES AND VARIETIES OF BACILLUS CEREUS GROUP.
W A Smirnoff
J Invertebrate Pathol 5(3):389-392
Sep 1963 421 J826
Inclusion bodies, Urea.

14958-68
SOUND PRODUCTION BY THE CEREAL LEAF BEETLE.
M E Smith
Entomol Soc Amer Ann 58(6):936, 2 REFS.
Nov 1965 42D EN82
Chrysomelidae, Stridulation.

14959-68
INHIBITION OF METAMORPHOSIS AND OF ECDYSIS IN MOSQUITOES.
A Spielman V Skaff
J Insect Physiol 13(7):1087-1095
Jul 1967 421 J825
Culicidae, DFA, Farnesoic acid, Metamorphosis, Molting (insects).

14960-68
A BIOASSAY TECHNIQUE FOR DETERMINING THE INSECTICIDAL ACTIVITY OF PREPARATIONS CONTAINING BACILLUS THURINGIENSIS BERLINER.
C M Splittstoesser F L McEwen
J Invertebrate Pathol 3(4):391-398, 11 REFS.
Dec 1961 421 J826
Bacillus thuringiensis, Biological assay, Biological control (insects), Musca domestica, Pieris rapae, Plutella maculipennis.

14961-68
EDITORIAL: A CALL TO INVERTEBRATE PATHOLOGISTS.
E A Steinhaus
J Invertebrate Pathol 3(1):I-III
Mar 1961 421 J826
Insect diseases.

14962-68
EXPOSURE OF HOUSE FLIES AND ORIENTAL RAT FLEAS ON A HIGH-ALTITUDE BALLOON FLIGHT.
W N Sullivan C N Smith
J Econ Entomol 53(2):247-248, BIBL.
Apr 1960 421 J822
Cosmic rays, Insect biology, Insects, Musca domestica, Radiation, Temperature.

14963-68
A CYTOPLASMIC POLYHEDROSIS OF CACTOBLASTIS CACTORUM (BERG).
M Tamashiro S S Huang
J Invertebrate Pathol 5(3):397-399
Sep 1963 421 J826
Cactoblastis cactorum, Polyhedroses.

14964-68
THE EPIZOOTIOLOGY OF VIRUS DISEASES IN FIELD POPDLATIONS OF THE ARMYWORM, PSEUDALETIA DNIPUNCTA (HAWORTH).
Y Tanada
J Invertebrate Pathol 3(3):310-323, 18 REFS.
Sep 1961 421 J826
Epizootic diseases, Granuloses, Insect diseases, Pseudaletia unipuncta, Virus diseases (insects).

14965-68
PARASITISM OF SIREX NOCTILIO F BY SCHLETTERERIDS CINCTIPES (CRESSON) (HYMENOPTERA: STEPHANIDAE).
K L Taylor
Entomol Soc Queensland J 6(1):13-19
30 Jun 1967 42D EN823
Insect biology, Parasitic insects, Pinus radiata, Rhyssa persuasoria, Sirex noctilio.

14966-68
QUANTITATIVE STUDIES ON PURINE EXCRETION IN THE GREATER WAX MOTH, GALLERIA MELLONELLA.
K K Thomas
Entomol Soc Amer Ann 58(6):883-885, 17 REFS.
Nov 1965 420 EN82
Galleria, Insect physiology, Nitrogen, Purines.

14967-68
RELATIVE SUSCEPTIBILITY OF SALT-MARSH MOSQUITOES FROM GEORGIA AND FLORIDA TO INSECTICIDES.
D E Weidhaas R R Ford
Fla Entomol 42(3):109-111, 4 REFS., 2 TABS.
Sep 1959 420 F662
Benzene hexachloride, Culicidae, Ddt, Georgia, Insecticide resistant insects, Florida.

14968-68
FAILURE TO ISOLATE MICROORGANISMS FROM WITHIN MOSQUITO EGGS.
G A Wistreich J Moore
Entomol Soc Amer Ann 56(4):559-561, 12 REFS., 1 TAB.
Jul 1963 420 EN82
Culicidae, Cultnre media, Insect eggs.

14969-68
SOME OBSERVATIONS ON THE FINE STRUCTURE OF THE MIDGUT OF THE MITE ANYSTIS SP.
K A Wright I M Newell
Entomol Soc Amer Ann 57(6):684-693, 12 REFS., 6 FIGS.
Nov 1964 420 EN82
Anystis, Insect physiology.

Genetics

14970-68
DEVELOPMENT OF DDT RESISTANCE IN CERTAIN MAYFLIES IN NEW BRUNSWICK.
C D Grant A W A Brown
Can Entomol 99(10):1040-1050
Oct 1967 421 C16
Canada, Ddt, Ephemeroptera, Insecticide resistant insects.

14971-68
RESISTANCE TO AMERICAN FOOL BROOD IN HONEYBEES. III. DIFFERENTIAL SURVIVAL OF THE TWO KINDS OF LARVAE FROM TWO-DRONE MATINGS.
L F Lewis W C Rothenbuhler
J Invertebrate Pathol 3(2):197-215, 9 REFS.
Jun 1961 421 J826
American foulbrood, Insect mating.

14972-68
SPERM DEPLETION IN CHEMOSTERILIZED AND NORMAL MALES OF THE YELLOW FEVER MOSQUITO, AEDES AEGYPTI.
V P Sharma K S Rai
Can Entomol 99(10):1116-1118
Oct 1967 421 C16
Aedes aegypti, Reproduction, Spermatozoa.

Medical Entomology

14973-68
CROSS-TOLERANCE OF CALIFORNIA AEDES NIGROMACULIS (LUDLOW) LARVAE TO EPN, ABATE, AND DURSBAN. (ABSTRACT).
P A Gillies D J Womeldorf K E White
Calif Mosquito Contr Ass Proc Pap 35:111
1967 428 C763
Aedes nigromaculis, Chemical control (insects), Dursban, Epn, Insecticide resistant insects.

14974-68
NEW METHODS OF INTRODUCING VISUAL AND AUDITORY CUES. (ABSTRACT).
J S Haeger
Calif Mosquito Contr Ass Proc Pap 35:106
1967 428 C763
Aedes taeniorhynchus, Attractants, Insect cages, Insect flight.

14975-68
MOSQUITO CONTROL ACTIVITIES OF THE U.S. ARMED FORCES IN THE REPUBLIC OF VIETNAM.
R T Holway A W Morrill F J Santana
Calif Mosquito Contr Ass Proc Pap 35:23-29
1967 428 C763
Armed forces, Culicidae, Insect control, Insect repellents, Insect vectors, Malaria.

14976-68
LABORATORY OBSERVATIONS OF AEDINE MOSQUITO OVIPOSITION (DIPTHERA, COLICIDAE, AEDES).
K L Knight D Sulzbach
Calif Mosquito Contr Ass Proc Pap 35:100-103 REF
1967 428 C763
Aedes, Culicidae, Insect behavior, Ovipositors.

14977-68
SOIL TREATMENTS WITH INSECTICIDES FOR CONTROL OF THE EYE GNATS HIPPELATES COLLOSOR AND H. HERMSI.
M S Mulla M M Barnes M J Garber
J Econ Entomol 53(3):362-365, BIBL., TABS.
Jun 1960 421 J822
Aldrin, DDT, Heptachlor, Hippelates, Insecticides.

14978-68
EFFICIENCY OF GRANULATED INSECTICIDES INFLUENCED BY SOLVENTS USED FOR IMPREGNATION.
M S Mulla H Axelrod
J Econ Entomol 53(5):938-949, 13 REFS., 10 FIGS.
Oct 1960 421 J822
Aquatic insects, Benzene hexachloride, Culicidae, EPN, Parathion.

14979-68
BIOLOGICAL ACTIVITY OF SURFACTANTS AND SOME CHEMICAL INTERMEDIATES AGAINST PRE-IMAGINAL MOSQUITOES.
M S Mulla
Calif Mosquito Contr Ass Proc Pap 35:111-117
1967 428 C763
Aedes nigromaculis, Biological assay, Culex pipiens quinquefasciatus, Detergents, Insecticide resistant insects, Larvicides, Surface-active agents, Toxicity.

14980-68
PANEL: OPPOSING PHILOSOPHIES IN MOSQUITO CONTROL TECHNOLOGY: EMPHASIS ON CONTROL OF ADULT MOSQUITOES IN FLORIDA.
J A Mulrennan A J Rogers
Calif Mosquito Contr Ass Proc Pap 35:29-31
1967 428 C763
Aedes, Culicidae, Insect control, Larvicides, Psorophora confinnis, Florida.

14981-68
INFESTATION OF THE IMPORTED FIRE ANT, SOLENOPSIS SAEVISSIMA V. RICHTERI, AT FORT BENNING, GEORGIA.
A T Olive
J Econ Entomol 53(4):646-648
Aug 1960 421 J822
Chemical control (insects), Georgia, Heptachlor, Solenopsis.

14982-68
A PRELIMINARY REPORT ON A POTENTIAL NEW MOSQOITO CONTROL WEAPON.
G M Stokes
Calif Mosquito Contr Ass Proc Pap 35:122
1967 428 C763
Ammonia, Culicidae, Diesel fuels, Insect control, Insecticides, Reports.
Abstract:
the United States' solution to laying down a smokescreen for the protection of naval vessels was to heat diesel fuel to a high temperature. the Argentine Navy's answer to the production of a smokescreen was to combine SiCl4 and ammonia water forming a very dense and heavy fog.

14983-68
ST. LOUIS ENCEPHALITIS VECTOR STUDIES IN HOUSTON, TEXAS.
W D Sudia P H Coleman R W Chamberlain J S Wiseman T H Woke
J Med Entomol 4_1)032-36, REF.
25 Apr 1967 421 J828
Anopheles quadrimaculatus, Arboviruses, California encephalitis virus, Culex pipiens quinquefasciatus, Culicidae, Human diseases, Saint Louis encephalitis.

10 14984-68

14984-68
THE EFFECTIVENESS OF LIQUEFIED-GAS-PROPELLED CONCENTRATED ALLETHRIN AEROSOLS AND AIR-ATOMIZED DIBROM AEROSOLS AGAINST NORMAL AND RESISTANT HOUSE FLIES.
W N Sullivan A H Yeomans M S Schechter
J Econ Entomol 53(5)'956, 1 REF., 1 TAB.
Oct 1960 421 JR22
Aerosols, Allethrin, Musca domestica, Naled.

14985-68
SOURCE REDUCTION THROUGH WATER MANAGEMENT.
D J Sutherland D M Jobbins L E Hagmann
Calif Mosquito Contr Ass Proc Pap 35:31-33
1967 428 C763
Culicidae, Insect control, Water.

14986-68
THE INFLUENCE OF SUBLETHAL DOSAGES OF INSECTICIDES ON THE BASAL FOLLICLES OF AEDES AEGYPTI (L.). (ABSTRACT).
D J Sutherland P D Beame A F Gupta
Calif Mosquito Contr Ass Proc Pap 35:110-111
1967 428 C763
Aedes aegypti, Dot, Dieldrin, Insect mortality, Insect rearing, Malathion.
Abstract:
it appears highly probable that at least some insecticides, while controlling mosquito populations, induce survivors to rebuild populations more rapidly than expected.

14987-68
EVALUATION OF THERMAL AND NONTHERMAL FOGS AGAINST FOUR SPECIES OF MOSQUITOES. (ABSTRACT).
R T Taylor H F Schoof
Calif Mosquito Contr Ass Proc Pap 35:109
1967 428 C763
Aedes aegypti, Aedes taeniorhynchus, Anopheles albimanus, Dursban, Malathion.

14988-68
PRELIMINARY REPORT ON THE FEEDING PATTERN OF TWO SPECIES OF FISH IN A RICE FIELD HABITAT.
R K Washino Y Hokama
Calif Mosquito Contr Ass Proc Pap 35:84-87
1967 428 C763
Culicidae, Fish, Gambusia, Habitats, Predatory animals, Rice.
Includes Gambusia affinis and Cyprinus carpio predatory activity on mosquito larvae.

20 CROP PROTECTION

14989-68
MAMMALIAN DETOXIFICATION OF INSECTICIDES.
A A deYakimac B A Akin
Agr Chem 19(9)'42,167, 3 TABS.
Sep 1964 381 AG8
Bayer 25141, Mice, Parathion, Pesticides, Poisoning.

14990-68
COLONIZATION OF SHORTLEAF PINE STUMPS.
F H Berry
Agr Chem 20(9)'117
Sep 1965 381 AG8
Ammoniam flouride, Ammonium sulfamate, Borateem, Borax, Conifers, Fungi, Urea.

14991-68
SEVERAL INSECTS CAUSE CONCERN.
K Dorward
Agr Chem 20(9)'67,172-174
Sep 1965 381 AG8
Anthonomus grandis, Diabrotica, Fleahoppers, Mites, Pest control.

14992-68
UPTAKE OF RADIOACTIVE ETHYL NN-DI-N-PROPYLTHIOCARBAMATE (EPTC-35 S) AND TRANSLOCATION OF SULPHUR-35 IN VARIOUS CROPS.
S C Fang P Theisen
J Sci Food Agr 12(2)'I-74-5
Feb 1961 382 SO12
EPTC, Ethyl NN -ki-n-propylthiocarbamate, Radioactive tracers, Sulfur isotopes, Vegetables.

14993-68
POPULATION ECOLOGY AND PEST CONTROL.
P W Geier
J Sci Food Agr 15(11)'II-238-1
Nov 1964 382 SO12
Ecology, Pest control.

Diseases

14994-68
A NEW STRAIN OF SUGARCANE MOSAIC VIRUS.
E V Abbott
Phytopathology 51(9):642
Sep 1961 464.8 P56
Mosaic (sugarcane).

14995-68
STEROID ALKALOIDS IN THE DISEASE RESISTANCE OF WHITE POTATO TUBERS.
E H Allen J Kuc
Phytopathology 54(8):886
Aug 1964 464.8 P56
Alkaloids, Chemical control (plant diseases), Potatoes, Steroids.

14996-68
TRISTEZA VIRUS IN ARIZONA CITRUS.
R M Allen H H McDonald W R Oden
Phytopathology 54(12):1431
Dec 1964 464.8 P56
Arizona, Arizona, Citrus, Tristeza (citrus).

14997-68
VARIABILITY OF SEEDLING CLONES OF CITRON AS INDICATORS OF EXOCORTIS VIRUS OF CITRUS.
R M Allen W R Oden
Phytopathology 54(12):1431
Dec 1964 464.8 P56

Citron, Indicator plants, Seedlings.

14998-68
DBY BCOI BOT OF CITBUS INDUCED BY AMMONIA ECXESSES.
E M Allen
Phytopathology 52(8):721
Aug 1962 464.8 P56
Ammonia, Citrus, Boot rot (citrus).

14999-68
IMMUNE BESPONSE TC A PLANT VIBUS BOUND OB SEROLOGICALLY PRECIPITATED IN AGAB.
W B Allen J H Tremaine
Phytopathology 52(8):721
Aug 1962 464.8 P56
Agar, Immunity, Bingspot (carnation).

15000-68
THE EFFECT OF CHLOBINATED C3 HYDBOCABBONS ON GBOWTB AND AMINO ACID PBODUCTION OF INDIGENOUS SOIL BACTEBIA.
J Altman S Lawlor
Phytopathology 54(8):886
Aug 1964 464.8 P56
Amino acids, Plant regulators, Soil bacteria.

15001-68
STUDIES ON A VIBUS CAUSING STEM GBOOVING AND GBAFT-UNION ABNOBMALITIES IN VIBGINIA CBAB APPLE.
O Amaro de Segueira
Ann Appl Biol 60(1):59-66, BEF.
Aug 1967 442.8 AN72
Apples, Plant abnormalities.

15002-68
METHODS OF MECHANICAL TRANSMISSION OF BEAN YELLCW MOSAIC VIBUS INTO WHITE CLOVEB.
L P Anderson J E Halpin
Phytopathology 51(9):642
Sep 1961 464.8 P56
Plant disease transmission, White clover, Yellow mosaic (beans).

15003-68
CONTBOL CF TOBACCO FLECK BY DUSTING WITB ZINEB.
P J Anderson
Phytopathology 51(8):574
Aug 1961 464.8 P56
Tobacco, Zineb.

15004-68
EFFECT OF DUTCH ELM DISEASE ON SEEDLING ELMS.
T Arisumi D J Biggins
Phytopathology 51(12):847-850
Dec 1961 464.8 P56
Dieback (elms), Ulmus.

15005-68
SOME CLOVEBS SUSCEPTIBLE TO THE CASSIA, COTTON, AND OTHEB WILT FUSABIA.
G M Armstrong J K Armstrong
Phytopathology 51(9):642
Sep 1961 464.8 P56
Clover, Cotton.

15006-68
PATBOGENICITY OF ISOLATES OF THE BEAN WILT FUSABIUM FBOM ENGLAND AND THE UNITED STATES.
G M Armstrong J K Armstrong
Plant Dis Bep 48(11):846-847
15 Nov 1964 1.9 P69P
Beans, England, Fusarium, United States.

15007-68
CBOWN AND BOOT BOTS OF ALFALFA AND BED CLOVEB AND THE BELATIVE PBEVALENCE OF ASSOCIATED FUNGI.
C Auhe J Deschenes
Plant Dis Bep 51(7):573-577
Jul 1967 1.9 P69P
Alfalfa, Crown rot, Bed clover, Boot rot.

15008-68
PRINCIPAL DISEASES AFFECTING PINUS BADIATA IN CHILE.
S H Autter
Fao Plant Protect Bull 15(1):17-18
Feb 1967 421 P692
Pinus radiata, Tree diseases.

15009-68
SEROLOGY OF THE POTATO SPINDLE TUBER VIRUS.
B H Bagnall
Phytopathology 57(5):533-534
May 1967 464.8 P56
Potatoes, Serological tests, Spindle tuber (potatoes).

15010-68
CBOSS-INOCULATION STUDIES WITH FOUB SPECIES OF ANTHRACNOSE FUNGI.
J F Baniecki D F Crossan
Phytopathology 53(7)'745
Jul 1963 464.8 P56
Anthracnose (apples), Anthracnose (piper nigrum), Anthracnose (tomatoes).

15011-68
COMPABISON OF ASTER YELLOWS AND BABLEY DWARF VIRUSES IN TWO BARLEY VARIETIES.
E E Banttari
Phytopathology 54(8):887
Aug 1964 464.8 P56
Aster yellows (barley), Barley.

15012-68
AN EVALUATION OF CEBTAIN FUNGICIDE - ADJUVANT COMBINATIONS FOR CONTBOL OF PECAN SCAB.
G L Barnes
46(4):236-239, TABS
15 Apr 1962
Fungicides, Scab (pecan).

15013-68
ORGANIC FUNGICIDES FOB CONTBOL OF PECAN SCAB.
G L Barnes
Agr Chem 17(11)'121
Nov 1962 381 AG8
Dyrene, Scab (pecans), Zineb.

15014-68
EFFECTS OF PLANT-BED APPLICATIONS OF 2,6-DICHLOBO-4-NITROANILINE ON CONTBOL OF SCLEROTIAL BLIGHT AND ON PLANT PBODUCTION IN SWEET POTATOES.
J B Barry W J Martin
Plant Dis Bep 51(3)0191-194
Mar 1967 1.9 P69P
Crop varieties, Dichloro-4-nitroaniline, 2,6-, Dosage, Fungicides, Sclerotium rolfsii, Sweetpotatoes.

15015-68
OCCUBRENCE AND AMOUNT OF STEM CAVITY BUSSET ON GOLDEN DELICIOUS APPLES.
E C Blodgett
Plant Dis Bep 51(4)0302-306
Apr 1967 1.9 P69P
Apples, Stem end russet (apples).

15016-68
STOBAGE AND GEBMINATION OF CUTTINGS AND SOIL MICROORGANISMS AS THEY BELATE TO THE PINEAPPLE DISEASE OF SUGAR CANE.
A W Boyd
Diss Abstr Sect B 27_11)03743B-3744B
May 1967 Z5055.U49D53
Endoconidiophora paradoxa, Pineapple disease _sugarcane), Rhizoctonia, Soil microorganisms, Sugarcane.

15017-68
THE RIBONUCLEIC ACIDS OF LEAVES AND PODS OF PEAS INFECTED WITH PEA ENATION MOSAIC VIBUS.
B F Bozarth L H Weinstein
Phytopathology 54(7):746
Jul 1964 464.8 P56
Enation mosaic (peas), Peas, Phytopathology, Virus diseases (plants).

15018-68
PATHOGEN VABIABILITY AND BREEDING VERTICILLIUM WILT RESISTANT STBAWBERRIES.
B S Bringhurst S Wilheim V Voth
Phytopathology 51(11):786-794
Nov 1961 464.8 P56
Plant breeding, Plant disease resistance, Strawberries, Verticillium wilt.

15019-68
EFFECT OF VARIATIONS IN TEMPEBATUBE ON THE BEACTION OF TEMPEBATUBE-SENSITIVE WHEAT VABIETIES TO WHEAT STEM RUST.
K R Bromfield
Phytopathology 51(11):794-797
Nov 1961 464.8 P56

2D 15020-68

Stem rust (wheat), Temperature, Wheat.

15020-68
SOME ENVIRONMENTAL FACTORS INFLUENCING PENETRATION FROM APPRESSORIA OF PUCCINIA GRAMINIS F. SP. TRITICI ON SEEDLING WHEAT LEAVES.
J F Brown W A Shipton
Phytopathology 54(8):949-951, TABS.
Aug 1964 464.8 P56
Leaves, Wheat.

15021-68
RAPID INDEXING OF EXOCORTIS IN CITRUS.
E C Calavan E F Frolich J R Carpenter C N Roistacher
Phytopathology 54(11):1359-1362
Nov 1964 464.8 P56
Citrus, Exocortis (citrus).

15022-68
DEPOSIT RATE AND SPRAY OIL COMPOSITION IN RELATION TO PHYTOTOXICITY AND SIGATOKA DISEASE CONTROL ON BANANA LEAVES.
L Calpouzos C Colberg T Theis N E Delfel
Phytopathology 51(8):582-584
Aug 1961 464.8 P56
Phytotoxicity, Sigatoka (bananas).

15023-68
VISCOSITY OF NAPHTHENIC AND PARAFFINIC SPRAY OILS IN RELATION TO PHYTOTOXICITY AND SIGATOKA DISEASE CONTROL ON BANANA LEAVES.
L Calpouzos N E Delfel C Colberg T Theis
Phytopathology 51(8):528-531
Aug 1961 464.8 P56
Paraffin oils, Toxicology, Viscosity.

15024-68
TRANSMISSION OF RADISH MOSAIC VIRUS.
R N Campbell W M Colt
Phytopathology 57(5):502-504
May 1967 464.8 P56
Mosaic (radishes), Plant disease transmission.

15025-68
THE EFFECT OF STORAGE MOLDS ON GERMINATION AND VIGOR OF CANNING PEAS.
L E Carlson T H King
52(8):727
Aug 1966
Peas, Plant hardiness, Seed germination, Storage diseases.

15026-68
MAINTAINING VIRUS-FREE CULTIVARS OF PEACH IN MICHIGAN.
D Cation
Plant Dis Rep 51(4)0261-263 REF
Apr 1967 1.9 P69P
Crop varieties, Peaches, Plant disease transmission, Seed-borne plant diseases, Virus diseases (plants).
Prunus ring spot virus (PRSV) is perpetuated in Michigan peach only through rootstocks infected from seed or by indiscriminate bud selection from latently infected trees in nursery practice. cherry yellows virus (CYV) from its ready recognition and minimal seed production is not a factor in peach. neither of these viruses is spread naturally in michigan orchards or nurseries. green ring mottle virus (GRMV) was not transmitted through seed. with the exception of GRMV which seems universally present in a few desirable cultivars it seems feasible to establish peach plantings free from known viruses. in many locations, according to these studies and observations, such plantings would continue virus free for the life of the orchard. gRMV must be tolerated as it has no apparent effect on peach quality, growth or yield. valuable and necessary varieties infected with GRMV could be grown separately. no data are known for the amount and distance of GRMV spread but sample indexings from old orchards indicate that spread in peach is not occurring in some areas.

15027-68
A REPORT OF THE OCCURRENCE OF CAMELLIA FLOWER BLIGHT IN MISSISSIPPI.
J H Cochran
Plant Dis Rep 46(8):617
15 Aug 1962 1.9 P69P
Blight (Camellia), Mississippi.

15028-68
FAILURE OF PSOROSIS VIRUS TO PROTECT AGAINST CITRUS VARIEGATION VIRUS.
M K Corbett W C Price
Phytopathology 57(2):151-153
Feb 1967 464.8 P56
Citrus, Plant disease control, Psorosis (oranges), Tristeza (citrus).

15029-68
AN EVALUATION OF TWO FUNGICIDES AS SOIL TREATMENTS WITH AND WITHOUT HERBICIDE FOR TOMATO FRUIT CONTROL.
D F Crossan A L Morehart
Plant Dis Rep 46(4):227-229
15 Apr 1962 1.9 P69P
Fungicides, Soil fumigation, Soil treatment.

15030-68
CONTROL OF BACTERIAL SPOT OF PEACH.
R H Daines
Agr Chem 19(12)'60
Dec 1964 381 AG8
Bacterial spot (peaches), Captan, Copper, Zinc chromate.

15031-68
SPRAY PROGRAMS AND THE CONTROL OF SOOTY BLOTCH OF APPLES.
R H Daines
Plant Dis Rep 46(7):513-515
15 Jul 1962 1.9 P69P
Chemical control (plant diseases), Sooty blotch (apples).

15032-68
DODINE (CYPREX) EFFECTIVE AGAINST BACTERIAL SPOT OF PEACH.
R H Daines
Phytopathology 51(8):576
Aug 1961 464.8 P56
Bacterial spot (peaches), Chemical control (plant diseases), Dodine.

15033-68
EVIDENCE FOR FUNCTIONAL CYTOCHROME OXIDASE IN TISSUES INFECTED BY OBLIGATE PARASITES.
J M Daly S G Jensen
Phytopathology 51(11):759-765, BIBL. 764-765
Nov 1961 464.8 P56
Cytochrome oxidase, Parasitism, Tissues.

15034-68
RESPIRATORY CHANGES DURING DEVELOPMENT OF RUST DISEASES.
J M Daly A A Bell L R Krupka
Phytopathology 51(7):461-471, BIBL. 471, TABS.
Jul 1961 464.8 P56
Metabolism, Uredinales.

15035-68
PLANT-TO-PLANT TRANSFER OF STONE FRUIT RINGSPOT VIRUS IN SQUASH BY POLLINATION.
C R Das J A Milbrath
Phytopathology 51(7):489-490
Jul 1961 464.8 P56
Fruit, Plant disease transmission, Pollination, Ring spot (fruit), Squash.

15036-68
MOSAIC SUSCEPTIBILITY OF SUGARCANE SEEDLINGS AS DETERMINED BY MECHANICAL INOCULATION AND NATURAL INFECTION.
J L Dean O R Coleman D M Broadhead
Phytopathology 51(9)643
Sep 1961 464.8 P56
Mosaic (sugarcane), Plant disease resistance.

15037-68
CERATOCYSTIS CANKER OF STONE FRUIT TREES.
J E DeVay F L Lukezic W H English E E Trujillo
Phytopathology 53(8):873
Aug 1963 464.8 P56
Canker (fruit), Ceratocystis canker, Fruit.

15038-68
BEAN YELLOW MOSAIC VIRUS IN DETACHED LEAVES OF RED CLOVER PLANTS.
S Diachun L Henson
Phytopathology 53(8):873-874
Aug 1963 464.8 P56
Leaves, Red clover, Yellow mosaic (beans).

15039-68
SUSCEPTIBILITY OF EASTERN WHITE PINE TO CHLOROTIC DWARF.
L S Dochinger C E Seliskar
Phytopathology 53(8):874
Aug 1963 464.8 P56
Chlorotic dwarf (pinus strobus), Pinus.

15040-68
A DRY 8OT OF ACORN SQUASH, CUCURRITA PEPO. L.
S T Doeung G F Weber
Phytopathology 53(8):874
Aug 1963 464.8 P56
Dry rot (winter squash), Glomerella, Physalospora, Winter sgnash.

15041-68
ACTION OF SOIL FUNGICIDES. IV. CHANGES IN THE SPECTRUM OF SOIL FUNGI. V. SENSITIVITY OF SOIL ORGANISM IN VIT8O.
K H Domsch
J Sci Food Agr 12(1)'I-16-4
Jan 1961 382 SO12
Captan, Naham, Soil fungi, Thiram, Vapam.

15042-68
TIME CF P8UNING AND INFECTION OF PEACH TREES RY PSEUDOMONAS SY8INGIAE.
W M Dcwler D R Petersen
Phytopathology 53(8):874
Ang 1963 464.8 P56
Peaches, Pruning, Pseudomonas.

15043-68
REET YELLOW STUNT VIRUS.
J E Duffus
Phytopathology 54(12):1432
Dec 1964 464.8 P56
8eets, Virus diseases (plants).

15044-68
EFFECT OF LIGHT ON TRE RATE OF DECAY OF TH8EE WOOD DEST8OYING FUNGI.
C G Duncan
Phytopathology 57(10):1121-1125
Oct 1967 464.6 P56
Light, Pinns, Wood destroying fungi.

15045-68
CONT8OL OF 8ROWN STEM 8OT OF SOYREANS WITH CORN-SOY8EAN 8OTATIONS.
J M Dunleavy C 8 Weber
Phytopathology 57(2):114-117
Feb 1967 464.8 P56
Brown stem rot (soybeans), Crop rotation, Soybeans.

15046-68
CE8COSPO8EILA LEAF SPOT-8ESISTANT 8ADISR G8EENS.
E L Felix
Phytopathology 54(8):892
Aug 1964 464.8 P56
Plant disease resistance, Radishes.

15047-68
EFFECTS OF LIGHT, TEMPERATURE, AND FERTILIZER ON INFECTION OF W8EAT LEAVES 8Y SEPTO8IA T8ITICI.
R Fellows
Plant Dis Rep 46(12):846-848, TARS.
15 Dec 1962 1.9 P69P
Fertilizers, Light, Temperature.

15048-68
SCME ORSE8VATIONS ON T8E NUM8ER OF ROOT LESION NEMATODES NECESSARY TO CAUSE INJURY TC SEEDLING ONIONS.
J M Ferris
Plant Dis Rep 46(7):484-485
15 Jnl 1962 1.9 P69P
Onions, Plant nematodes, Seedlings.

15049-68
RRIZOCTONIA TIP RLIGHT AND STEM 8OT OF PEA.
N T Flentje D J Hagedorn
Phytopathology 54(7):788-791
Jul 1964 464.8 P56
Peas, Stem rot (peas), Tip blight (peas).

15050-68
ANTI8IOTIC TREATMENT OF YOUNG LO8LOLLY PINES INFECTED WITH FUSIFORM 8UST.
R R Foil 8 G Merrifield T Ranshrongh
Plant Dis Rep 51(3):223-224
Mar 1967 1.9 P69P
Antibiotics, Cronartium fusiforme, Cycloheximide, Fungicides, Fungus diseases (plants), Pinus taeda, Rust (pinus taeda), Tree diseases.
Abstract:
application of cycloheximide derivatives to lohlolly pines infected with fnsiform rust resulted in death of diseased tissue, bnt also caused the eventual death of the host trees by restriction of translocation. satisfactory results were attained only in cases where infected tissues occupied less than half the hole surface.

15051-68
THE INTE8ACTION OF POTATO VI8USES X AND Y IN INOCULATED TOBACCO LEAVES AT VARIOUS TEMPERATU8ES.
R E Ford A F Ross
Phytopathology 51(8):576
Aug 1961 464.8 P56
Immunization, Tobacco.

15052-68
PURIFICATION OF VIRUSES F8OM PEA ROOTS.
8 E Ford
Phytopathology 54(12):1433
Dec 1964 464.8 P56
Peas, Roots, Viruses.

15053-68
REDUCTION OF ASTE8 YELLOWS.
R A Fredericksen
Agr Chem 18(9)'147,181-182
Sep 1963 381 AG8
Aster yellows (flax), Disulfoton, Macrosteles, Phorate.

15054-68
EFFECTS OF TIME AND TEMPERATURE ON 8ATE OF GRAFT TRANSMISSION OF THE PRUNUS RINGSPOT VIRUS.
P 8 Fridlund
Phytopathology 57(2):230-231
Feh 1967 464.8 P56
Plant disease transmission, Plant temperature, Ring spot (prunus).

15055-68
ALFALFA MOSAIC VIRUS TRANSMITTED TROUGR ALFALFA SEED.
F I Frosheiser
Phytopathology 54(8):893
Ang 1964 464.8 P56
Alfalfa, Mosaic (alfalfa), Plant disease transmission.

15056-68
INCLUSION RODIES ASSOCIATED WITH SUGAR REET MOSAIC.
I Fujisawa C Matsui A Yamaguchi
Phytopathology 57(2):210-213
Feb 1967 464.8 P56
Inclusion hodies, Mosaic (sugar beets).

15057-68
A NEW FUNGUS LEAF SPOT DISEASE OF CUCUMRER IN WESTERN WASHINGTON.
R L Gabrielson L Campbell
Phytopathology 54(12):1433
Dec 1964 464.8 P56
Cucumbers, Washington.

15058-68
AN ANOMALOUS EFFECT OF PENTACHLORONITRORENZENE ON THE INCIDENCE OF DAMPING-OFF CAUSED 8Y A PHYTHIUM SP.
I A Gibson M Ledger E 8oehm
Phytopathology 51(8):531-533, TARS.
Aug 1961 464.8 P56
Pentachloronitrohenzene.

15059-68
HEAT ACTIVATION OF VIRUS INOCULUM.
C C Gill C E Yarwood
Phytopathology 54(12):1433
Dec 1964 464.8 P56
Heat, Virology.

15060-68
EVIDENCE AGAINST SEED TRANSMISSION OF G8EEN RING MOTTLE VIRUS IN MAZZARD CHERRY SEEDLINGS.
R M Gilmer K D 8rase
Plant Dis Rep 46(5):356
15 May 1962 1.9 P69P
Green ring mottle (cherries), Plant disease transmission.

15061-68
ALTERNARIA OF COTTON IN SOMALIA. (IT)
C Golato
8iv Agr Subtrop Trop 61(1/3) 11-14. REF.
Jan 1967 26 AG82
Alternaria macrospora, Cotton, Fungus diseases (plants).

15062-68
ANTIHOST SERUM IMPROVES PLANT VIRUS PURIFICATION.
A H Gold
Phytopathology 51(8):561-565
Aug 1961 464.8 P56
Serum, Virus diseases (plants).

15063-68
SPECIES OF LEPTOSPHAERULINA ON FORAGE PLANTS.
J H Graham E S Luttrell
Phytopathology 51(10):680-693, BIBL. 692-693, TABS.
Oct 1961 464.8 P56
Forage plants, Leptosphaerulina.

15064-68
BRUISING AS A PREDISPOSING FACTOR IN THE DECAY OF STORED CRANBERRIES.
S O Graham M E Patterson B Allen
Phytopathology 57(5):497-501
May 1967 464.8 P56
Cranberries, Storage injuries.

15065-68
CONTROL OF VERTICILLIUM WILT OF PEPPERMINT BY SOIL FUMIGATION IN MUCK SOIL.
R J Green Jr
Plant Dis Rep 48(12):960-963, TABS.
15 Dec 1964 1.9 P69P
Fungicides, Muck soils, Verticillium.

15066-68
PHYSIOLOGICAL BASIS OF GALL FORMATION IN BLACK-KNOT DISEASE OF PRUNUS.
G L Greene
Phytopathology 52(9):880-884, BIBL. 883-884
Sep 1962 464.8 P56
Plant galls, Plant physiology, Prunus.

15067-68
PURIFICATION OF PEA ENATION MOSAIC VIRUS.
S Gross
Phytopathology 55(2):127
Feb 1965 464.8 P56
Enation mosaic (peas), Peas, Purification.

15068-68
EFFECT OF INCUBATION TEMPERATURE ON LENGTH AND INFECTIVITY OF POTATO VIRUS X PARTICLES IN FOUR HOST SPECIES.
J W Guthrie
Phytopathology 55(6):607-611, BIBL., TABS.
Jun 1965 464.8 P56
Incubation, Infectious diseases, Potatoes, Temperature, Virus x (potatoes).

15069-68
A NEW METHOD OF APPLYING BIPHENYL FOR THE CONTROL OF CITRUS FRUIT ROTS.
Y Gutter
Plant Dis Rep 51(1):58-61
Jan 1967 1.9 P69P
Biphenyl, Rot (lemons), Rot (oranges).

15070-68
SEVERITY AND DISTRIBUTION OF COTTON BOLL ROT AS RELATED TO TEMPERATURE.
P M Halisky W C Schnathorst M A Shagrun
Phytopathology 51(8):501-505
Aug 1961 464.8 P56
Fungi, Temperature.

15071-68
UNDESCRIBED PLANT DISEASES AND NEW HOSTS RECORDED IN OREGON DURING 1960-1961.
R S Halliwell I C MacSwan
Plant Dis Rep 46(1):30
15 Jan 1962 1.9 P69P
Plant diseases.

15072-68
ACCUMULATION OF FLUORESCENT COMPOUNDS IN TOBACCO ASSOCIATED WITH TOBACCO MOSAIC VIRUS HYPERSENSITIVITY.
R E Hampton R Suseno D M Brunagen
Phytopathology 54(9):1062-1064
Sep 1964 464.8 P56
Fluorescent substances, Hypersensitivity, Mosaic (tobacco).

15073-68
INDEX TO GENERA OF PATHOGENS LISTED IN THE "INDEX OF PLANT DISEASES IN THE UNITED STATES. 1.
R T Hanlin J R Chalkley
Plant Dis Rep 51(3)0235-240
Mar 1967 1.9 P69P
Indexes, Microorganisms, Plant diseases, United States.

15074-68
EFFECT OF BORDEAUX SPRAY AND PLASTIC COVERING IN PREVENTING INVASION OF LOW-TEMPERATURE-INJURED STEMS OF PRUNE TREES BY CYTOSPORA FUNGI.
A W Helton
Plant Dis Rep 46(2):77-79
15 Feb 1962 1.9 P69P
Bordeaux mixture.

15075-68
BEHAVIOR OF WESTERN X VIRUS IN WELLROGUED PEACH AND CHERRY ORCHARDS.
A W Helton
Phytopathology 51(7):488-489
Jul 1961 464.8 P56
Cherries, Peaches.

15076-68
ADDITIONAL EVIDENCE ON SOIL TRANSMISSION OF TOBACCO RINGSPOT VIRUS.
J W Hendrix J P Fulton J L Dale
Phytopathology 51(9):643
Sep 1961 464.8 P56
Plant disease transmission, Ring spot (tobacco).

15077-68
THE POSSIBLE USE OF PINE NEEDLES AS SPORE TRAPS.
J W Hendrix
Phytopathology 53(8):878
Aug 1963 464.8 P56
Pine needles, Puccinia, Traps.

15078-68
A PINE DISEASE IN NEW ZEALAND RESEMBLING LITTLELEAF.
G H Hepting F J Newhook
Plant Dis Rep 46(8):570-571
15 Aug 1962 1.9 P69P
Little leaf (pinus).

15079-68
INOCULATION OF ETIOLATED BUT LIGHT-TREATED LEAVES OF GRAPE WITH FANLEAF VIRUS.
W R Hewitt L Cory
54(8):895
Aug 1964
Fanleaf (grapes), Grapes, Light.

15080-68
EFFECT OF VIRUS YELLOWS ON YIELD AND QUALITY OF SUGAR BEET SEED.
O A Hills C W Bennett H K Jewell D L Coudriet R W Brubaker
J Econ Entomol 53(1):162-164, BIBL., PL.
Feb 1960 421 JR22
Curly top (sugar beets), Germination reduction, Seed germination, Sugar beets, Yellows (sugar beets).

15081-68
FIELD OBSERVATIONS ON ROOT ROT OF TEAK IN TANZANIA.
D Hocking A A Jaffer
Fao Plant Protect Bull 15(1):10-14
Feb 1967 421 P692
Tectona grandis, Tree diseases.

15082-68
COMPARISON OF HEAT AND QUICK FREEZING FOR RELAXING NEMATODES PRIOR TO PERMANENT MOUNTING.
J K Hoff W F Mai
Phytopathology 54(7):869
Jul 1964 464.8 P56
Animal anatomy, Heat, Nematodes, Nematology.

15083-68
RESISTANCE TO SEVERAL VIRAL DISEASES INHERITED AS A UNIT.
F O Holmes
Phytopathology 51(8):577
Aug 1961 464.8 P56
Plant disease resistance, Virus diseases (plants).

15084-68
RADISH MOSAIC VIRUSES.
J C Horton G S Pound T P Pirone
Phytopathology 51(7):434-440
Jul 1961 464.8 P56
Mosaic (radishes), Virus diseases (plants).

15085-68
CONTROL OF ALTERNABIA BLIGHT OF RAPE AND MUSTARD BY GBISEOFULVIN.
A Hnsain R N Thakur
Plant Dis Bep 46(9):672-673
15 Sep 1962 1.9 P69P
Blight (rape), Griseofulvin.

15086-68
SPORULATION OF PHYTOPHTHORA PHASEOLI.
R A Hyre G Ettinger
Plant Dis Bep 51(4)0253-256
Apr 1967 1.9 P69P
Downy mildew (lima heans), Lima heans, Sporulation.
Pennsylvania Agricultnral Experiment Station cooperating.
The optimum temperature range for sporulation of Phytophthora phaseoli on ycung "Fordhook" lima bean stems was 18-22 degrees C. ahout 50 percent as many sporangia occurred at 15 degrees and 25 degrees. very few occurred at 5 degrees and 30 degrees. at 20 degrees ahont 300 sporangia per cm-2 were present in 3 hours, 6,000 in 6 hours, 100,000 in 12 hours, and 225,000 in 24 hours. on the same lesion over 80 percent of the total nnmher were present the first day, 12 percent the second day, and 4 percent the third day. on young infections many sporangia were formed after 2 days" colonization at 20-25 degree C: the maximum number (ahout 4 million per lesio). were formed after 4 days: and then the numhers rapidly declined the next 3 days. significantly (,=0.05) more sporangia occurred with a 16-hour day, 8-honr night, than with a 12-hour day, 12-honr night during the colonization period.

15087-68
FORECASTING DOWNY MILDEW OF LIMA BEAN IN CAPE MAY COUNTY, NEW JERSEY.
B A Byre J MacLeod S B Davis Jr
Plant Dis Bep 46(6):393-395
15 Jnn 1962 1.9 P69P
Downy mildew (lima heans), New Jersey.

15088-68
FUNGI ASSOCIATED WITH GLADIOLUS ROOTS UNDER CONTINUOUS CROPPING CONDITIONS.
C B Jackson
Plant Dis Bep 46(5):312-317
15 May 1962 1.9 P69P
Crop rotation, Fungus diseases (plants), Gladiolus, Roots.

15089-68
PEAR DECLINE VIRUS TBANSMISSION BY PEAR PSYLLA.
D D Jensen W G Griggs C Q Gonzales B Schneider
Phytopathology 54(11):1346-1351, BIBL. 1351, TABS.
Nov 1964 464.8 P56
Decline (pears), Insect vectors, Pears,
Plant disease transmission.

15090-68
RESISTANCE TO FUSIFORM RUST IN SLASH PINE AS SHOWN BY ABTIFICIAL INCCULATION.
F F Jewell S L Mallett
Phytopathology 54(10):1294
Oct 1964 464.8 P56
Pinus elliottii, Plant disease resistance,
Rust (pinns elliottii).

15091-68
AN OUTBREAK OF BROADBEAN DISEASES IN IRAN.
W J Kaiser K E Mueller D Danesh
Plant Dis Bep 51(7):595-599
Jul 1967 1.9 P69P
Broadheans, Chocolate spot (broadheans), Mosaic (broadheans), Bust (heans).

15092-68
CONTBOL OF CUCUMBER SCAB DUE TO CLADOSPORIUM CUCUMBERINUM.
J G Kantzes L O Weaver J M Wells
J Sci Food Agr 15(9)'II-129-2
Sep 1964 382 S012
Cncumbers, Difolotan, Dithane M-45, Folpet, Maneh.

15093-68
EFFECT OF S-TRIAZINE AND PBENYLUREA HERBICIDES ON SOIL FUNGI IN COBN- AND SOYBEAN-CROPPED SOIL.
D D Kaufman
Phytopathology 54(8):897
Aug 1964 464.8 P56
Chemical control (plant diseases), Corn, Herbicides, Soyheans.

15094-68
SELECTIVE ISOLATION OF SOFT-ROT BACTERIA OF ONION.
S O Kawamoto J W Lorbeer
Phytopathology 54(8):897
Aug 1964 464.8 P56
Onions.

15095-68
EPIDEMIOLOGY OF TEA BLISTER BLIGHT (EXOBASIDIUM VEXANS). III. SPORE DEPOSITION AND DISEASE PREDICTION.
A Kerr W B F Rodrigo
Brit Mycol Soc Trans 50(1)'49-55
Mar 1967 451 B76
Blister blight (tea), Exobasidinm vexans, Forecasting, Plant diseases.

15096-68
TBE EFFECT OF PEBICARP ON COVEBED SMUT INFECTION OF NAKED BABLEY VABIETIES.
B L Kiesling
Phytopathology 52(8):738
Aug 1962 464.8 P56
Barley, Covered smut (barley).

15097-68
FUNGI ASSOCIATED WITH LARVAE OF SITONA SPP.
R A Kilpatrick
Phytopathology 51(9):640
Sep 1961 464.8 P56
Fnngi, Larvae.

15098-68
SEEDLING DISEASE OF WHEAT CAUSED BY SCLEBOTIUM ROLFSII.
B A Kilpatrick O G Merkle
Phytopathology 57(6):538-540
Jun 1967 464.8 P56
Panogen, Sclerotium rolfsii, Seed treatment, Wheat.
Texas A*fm University cooperating.
Abstract:
treating seeds with Panogen improved germination of one variety hut had little or no effect on controlling the disease.

15099-68
PROTECTION OF CUCUMBER SEEDLINGS FROM STONE FRUIT BINGSPOT VIRUS BY 8-AZAAGUANINE.
R C Kirkpatrick R C Linder
Phytopathology 51(10):727-730
Oct 1961 464.8 P56
Cncumbers, Guanazolo, Plant protection.

15100-68
STUDIES ON TBE CONTROL OF BLACK BOT OF CBUCIFEBS BY TBEATING SEEDS WITH ANTIBIOTICS.
J M Klisiewicz G S Pound
Phytopathology 51(8):495-500, TABS.
Aug 1961 464.8 P56
Antibiotics, Plant disease control, Seed treatment.

15101-68
THE DIPHENYLAMINE BEACTION AND TBANSMISSION EXPERIMENTS WITB PHENOL EXTRACTS OF PLANTS INFECTED WITH POTATO LEAF ROLL VIRUS.
R Koenig W C Mueller
Phytopathology 54(10):1223-1227, BIBL. 1227
Oct 1964 464.8 P56
Leaf roll (potatoes), Phenols, Plant disease transmission.

15102-68
PHYSIOLOGICAL FACTORS IN THE ETIOLOGY AND ALLEVIATION OF SALT-INDUCED DECLINE OF ROADSIDE MAPLES AND PINES.
J B Kotheimer
Diss Abstr Sect B 28(3):760B-761B
Sep 1967 Z5U55.U49D53
Acer, Pinus, Plant physiological diseases, Sodinm chloride.

15103-68
PURIFICATION, SEROLOGY, AND PROPERTIES OF A NEW COWPEA VIBUS.
C W Kuhn
Phytopathology 54(7):853-857, BIBL. 857
Jul 1964 464.8 P56
Cowpeas, Mottle (cowpeas), Serological tests, Virology, Virus diseases (plants), Viruses.

15104-68
FLUORESCENT ANTIBODY TECHNIQUE FOR DETECTION OF POLYPORUS TOMENTOSUS.
D Kumar R F Patton
Phytopathology 54(8):898

Aug 1964 464.8 P56
Polyporus tomentosus.

15105-68
CANKERS OF ORNAMENTAL CRABAPPLES ASSOCIATED WITH PHYSALOSPORA OBTUSA AND OTHER MICROORGANISMS.
W R Landis J H Hart
Plant Dis Rep 51(3):230-234 REF
Mar 1967 1.9 P69P
Canker (crabapples), Crabapples, Microorganisms.
A trunk canker of ornamental crabapples is common on the Michigan State University campus. physalospora obtusa (Schw.) Cke. was isolated from 42 of 59 cankered trees. three other organisms were isolated from the remaining 17 trees. attempts to inoculate 2-year-old grafted plants failed until the trees were subjected to water stress, after which P. obtusa and Phoma mali Schulz. and Sacc. produced cankers. mature trees of four different cultivars were inoculated with P. obtusa and developed typical cankers.

15106-68
THE OCCURRENCE OF A PHYTOPHTHORA ROOT AND LEAF DISEASE OF BLACK PEPPER IN JAMAICA.
R I Leather
Pao Plant Protect Bull 15(1):15-16
Feb 1967 421 P692
Fungus diseases (plants), Meloidogyne, Phytophthora, Piper nigrum.

15107-68
MICROORGANISMS ON CUCUMBER SEEDLINGS.
C Leben
Phytopathology 51(8):553-557, BIBL.
Aug 1961 464.8 P56
Microorganisms, Seedlings.

15108-68
STEMPHYLIUM LEAF SPOT OF PARSLEY.
G D Lewis
Phytopathology 52(9):925
Sep 1962 464.8 P56
Parsley, Stempbylium.

15109-68
CONTROL OF ASPARAGUS RUST WITH A MIXTURE OF MANEB AND NICKEL SULFATE.
G D Lewis P R Shoemaker
Agr Chem 20(5)'78
May 1965 381 AG8
Fungicides, Maneb, Nickel sulfate, Rust (asparagus).

15110-68
HEAT-INDUCED SUSCEPTIBILITY OF TOBACCO TO TROPAEOLUM MOSAIC VIRUS.
S C Y Liu K M Silberschmidt
Phytopathology 51(6):413-415
Jun 1961 464.8 P56
Plant disease control, Tobacco.

15111-68
EVIDENCE OF "RUNNING OUT" IN NON-CERTIFIED POTATOES USED FOR SEED.
C H Livingston M D Harrison K W Knutson
Plant Dis Rep 51(4):298-299
Apr 1967 1.9 P69P
Crop yields, Seed potatoes.

15112-68
PHOTOSYNTHESIS IN HEALTHY AND RUST-AFFECTED TISSUES.
A Livne
Phytopathology 52(8):739-740
Aug 1962 464.8 P56
Photosynthesis, Plant diseases, Rust (beans), Rust (wheat).

15113-68
PEROXIDASE ACTIVITY IN VIRUS-INFECTED SWEET POTATOES.
G Loebenstein N Linsey
Phytopathology 51(8):533-537
Aug 1961 464.8 P56
Peroxidases, Sweetpotatoes.

15114-68
IDENTIFICATION AND DISTRIBUTION OF OAT SMUTS OF THE SOUTHEASTERN UNITED STATES.
H H Luke
Phytopathology 54(7):792-794, TABS.
Jul 1964 464.8 P56
Oats, Smut (oats).

15115-68
OAT SMUT RACES OF THE SOUTH ATLANTIC STATES.
H H Luke P L Pfahler S J Hadden
Phytopathology 51(7):490-491
Jnl 1961 464.8 P56
Ethnology, Loose smut (oats).

15116-68
WILT DISEASE OF GOLF GREENS AND ITS CONTROL WITH NABAM.
R J Lukens E M Stoddard
Phytopathology 51(8):577
Aug 1961 464.8 P56
Nabam.

15117-68
PEROXIDASES AND THEIR RELATION TO VASCULAR BROWNING IN BANANA ROOTS.
M E Mace
Phytopathology 54(8):1033-1034
Aug 1964 464.8 P56
Bananas, Peroxidases, Roots.

15118-68
MULTIPLICATION AND MOVEMENT OF WISCONSIN PEA STREAK VIRUS IN PEA.
J N C Maduewesi
Phytopathology 54(8):899
Aug 1964 464.8 P56
Plant disease transmission, Reproduction, Streak (peas).

15119-68
THE INFLUENCE OF REDUCING SUBSTANCES ON RESISTANCE TO BACTERIAL WILT OF TOBACCO.
E C Maine A Kelman
Phytopathology 51(7):491-492
Jul 1961 464.8 P56
Bacterial wilt (tobacco), Tobacco.

15120-68
NUCLEOTIDE COMPOSITION OF RNA IN HEALTHY AND MILDEW-INFECTED LEAVES OF BARLEY.
I Malca F P Zscheile Jr R Gulli
Phytopathology 54(9):1112-1116, BIBL. 1115-1116
Sep 1964 464.8 P56
Barley, Mildew (barley), Nucleotides, Ribonucleic acid.

15121-68
INTERNAL SPOTTING OF COCONUTS.
K Maramorosch H Rothkirch R S Castillo
Phytopathology 51(8):577
Aug 1961 464.8 P56
Coconuts.

15122-68
EFFECTS OF RIG VEIN ON THE IRRIGATED READ LETTUCE CROP.
R R Marlatt R T McKittrick
Plant Dis Rep 46(6):428-429
15 Jun 1962 1.9 P69P
Rig vein (lettuce), Lettuce.

15123-68
SWEETPOTATO SOIL ROT DEVELOPMENT IN OLIVIER SILT LOAM SOIL AS AFFECTED BY ANNUAL APPLICATIONS OF LIME OR SULFUR OVER A SEVEN-YEAR PERIOD.
W J Martin L G Jones T P Hernandez
Plant Dis Rep 51(4):271-275
Apr 1967 1.9 P69P
Lime, Loam, Silt, Streptomyces ipomoea, Sulfur, Sweetpotatoes.
In an (olivier silt loam soil at Chase, Louisiana sweetpotato soil rot incidence in 1965 and 1966 generally was high in plots receiving annual applications of lime and ranging in pH from 6.3 to 6.8, low in plots receiving annual applications of sulfur and ranging in pH from 4.1 to 4.8, and low to high in plots receiving neither amendment and ranging in pH from 4.8 to 5.8. the data 1) emphasize the importance of not adding lime to sweetpotato soils that are, or might become, infested with soil rot, 2) confirm the effectiveness of sulfur application to the soil in controlling soil rot, and 3) give additional evidence that soil rot is not a serious problem in silt loam soils in Louisiana with pH below 5.2.

15124-68
PEANUT STUNT DISEASE SURVEY IN VIRGINIA, 1966.
W R Matheny D H Kludy
Plant Dis Rep 51(3):169
Mar 1967 1.9 P69P
Peanuts, Stunt (peanuts), Virus diseases (plants).

15125-68
THE AMINO ACID AND SUGAR COMPOSITIONS OF HEALTHY AND ANTHRACNOSE-INFECTED WATERMELONS.
C L McCombs N N Winstead
Phytopathology 51(9):644
Sep 1961 464.8 P56
Amino acids, Sugar, Watermelons.

15126-68
TRANSMISSION OF APPLE MOSAIC AND STEM-PITTING VIRUSES THROUGH ROOT GRAFTS.
R C McCrum
Phytopathology 52(9):925
464.8 P56
Mosaic (apples), Plant disease transmission, Plant grafting, Roots, Virus diseases (plants).

15127-68
A STUDY OF SYMPTOMS AND CONTROL OF PHOMOPSIS JUNIPEROVORA ON ARIZONA CYPRESS.
A T McDaniel
Plant Dis Rep 46(5):364-365
15 May 1962 1.9 P69P
Chemical control (plant diseases), Cupressus arizonica, Phomopsis juniperovora.

15128-68
CHEMICALS FOR PLANT DISEASE CONTROL.
R McGrath
Agr Chem 19(7)'18-22
Jul 1964 381 AGB
Chloramphenicol, Dehydroacetic acid, Oxytetracycline, Plant disease control, V-C13 nemacide.

15129-68
SYMPTOMS OF TOBACCO RINGSPOT VIRUS ON PAPAYA.
D M McLean E O Olson
Plant Dis Rep 46(12):882
15 Dec 1962 1.9 P69P
Papayas, Ring spot (tobacco).

15130-68
SEED TRANSMISSION OF BEAN MOSAIC VIRUSES.
A C Medina R G Grogan
Phytopathology 51(7):452-456, BIBL. 456, TABS.
Jul 1961 464.8 P56
Mosaic (beans), Seed-borne plant diseases.

15131-68
ANTHRACNOSE, SCAB, AND SOIL ROT OF CUCUMBERS.
P Miller
Agr Chem 20(12)'67
Dec 1965 381 AGB
Anthracnose (cucumbers), Cucumbers, Scab (cucumbers).

15132-68
THE EFFECT OF CORN ROOT EXUDATE ON THE GROWTH OF FIVE FUNGI ASSOCIATED WITH CORN ROOTS.
R E Miller
Phytopathology 53(8)'882-883
Aug 1963 464.8 P56
Corn, Exudates, Fusarium, Gibberella, Helminthosporium, Penicillium, Roots, Trichoderma.

15133-68
USE OF POLYETHYLENE BAGS FOR CORN ROOT INFECTION STUDIES.
R E Miller C W Boothroyd
Phytopathology 51(8):578
Aug 1961 464.8 P56
Corn, Polyethylene, Roots.

15134-68
INFLUENCE OF SOME REPRESENTATIVE HERBICIDAL CHEMICALS UPON THE GROWTH OF SOME SOIL FUNGI.
D F Millikan M L Fields
Phytopathology 54(8):901
Aug 1964 464.8 P56
Herbicides, Soil fungi.

15135-68
HULL ROT DISEASE OF ALMONDS.
C J Mirocha E E Wilson
Phytopathology 51(12):843-847
Dec 1961 464.8 P56
Almonds, Hull rot (prunus amygdalus).

15136-68
ROLE OF FUMARIC ACID IN THE HULL ROT DISEASE OF ALMOND.
C J Mirocha J E DeVay E F Wilson
Phytopathology 51(12):851-860, BIBL. 860, TABS.
Dec 1961 464.8 P56
Fumaric acid, Hull rot (prunus amygdalus).

15137-68
RELATION BETWEEN RESIDUES OF FOLPET AND CONTROL OF BROWN ROT ON SOUR CHERRY FRUIT IN DOOR COUNTY, WISCONSIN, 1962.
J E Mitchell A V Ravenscroft R D Berger J D Moore
Agr Chem 19(8)'70
Aug 1964 381 AGB
Brown rot (cherries), Folpet, Pesticide residues.

15138-68
SYSTEMIC AND FUNGICIDAL ACTIVITY OF D-, L-, AND DL-ETHIONINE, S-ALKYL-DL-HOMOCYSTEIN DERIVATIVES, AND METHIONINE ANTAGONISTS.
W Moje J R Kendrick Jr G A Zentmyer
Phytopathology 53(8)'883
Aug 1963 464.8 P56
Ethionine, Homocystine, Methionine, Phytophthora.

15139-68
INFLUENCE OF NUTRITION, PH, SOIL TEMPERATURE, AND SOIL MOISTURE ON PHYTHIUM BLIGHT OF HIGHLAND BENTGRASS.
L D Moore H R Couch J R Bloom
Phytopathology 51(8):578
Aug 1961 464.8 P56
Hydrogen-ion concentration, Plant nutrition, Soil moisture, Soil temperature.

15140-68
FACTORS IN THE PRODUCTION AND STIMULATION OF SOME ANTIBIOTICS OF FUNGAL ORIGIN INHIBITING THE GROWTH OF PATHOGENIC FUNGI. (FR)
R Morgner L Lacoste G Blaha
Acad Sci Compt Rend Ser D Sci Nat 264 _15), 1840-1843
10 Apr 1967 505 P21
Antibiotics, Fungus diseases _plants), Plant growth inhibitors, Toxicity.

15141-68
HOST RANGE AND PROPERTIES OF THE GLOBE ARTICHOKE CURLY DWARF VIRUS.
D J Morton
Phytopathology 51(10):731-734
Oct 1961 464.8 P56
Artichokes, Curly dwarf (artichokes), Host indexing (plants).

15142-68
RESISTANCE OF BRASSICA OLERACEA VARIETIES TO DOWNY MILDEW.
J J Natti M R Dickson J D Atkin
Phytopathology 57(2):144-147
Feb 1967 464.8 P56
Cabbage, Downy mildew, Plant disease resistance.

15143-68
LEAFROLL OF TOMATO CAUSED BY A STRAIN OF POTATO LEAFROLL VIRUS.
J J Natti W T Schroeder
Phytopathology 51(8):578
Aug 1961 464.8 P56
Leaf roll (potatoes).

15144-68
A SURVEY OF CARNATION DISEASES IN SOUTH SWEDEN.
G I Nilsson
Plant Dis Rep 46(3):152-155
15 Mar 1962 1.9 P69P
Dianthus caryophyllus, Plant diseases.

15145-68
FURTHER ADDITIONS TO THE LIST OF FUNGUS PATHOGENS RECORDED IN CHILE.
S F Nome W J Moller D Docampo H English
Plant Dis Rep 51(3):213-214
Mar 1967 1.9 P69P
Economic plants, Host specificity, Ornamental plants, Weeds.

15146-68
SYMPTOMLESS HOSTS OF THE POTATO SPINDLE TUBER VIRUS.
M J O'Brien W R Raymer
Phytopathology 54(9):1045-1047
Sep 1964 464.8 P56
Plant disease resistance, Potatoes, Spindle tuber (potatoes).

15147-68
EFFECT OF VOLUME AND VARIATION IN DROPLET SIZE OF SPRAY APPLICATIONS FROM AN AIR-CARRIER SPRAYER ON CONTROL OF THREE ALMOND DISEASES.
J M Ogawa W E Yates
Plant Dis Rep 46(8):614-615

20 15148-68

15 Aug 1962 1.9 P69P
Aerial plant disease control, Almonds.

15148-68
LEAF SPOT OF GUAR CAUSED BY PSEUDOMONAS SYRINGAE IN THE UNITED STATES.
R G Orellana
Plant Dis Rep 51(3):182-184
Mar 1967 1.9 P69P
Guar, Leaf spot (guar), Pseudomonas syringae.
A leaf spot of guar caused by Pseudomonas syringae in Texas and in Oklahoma in 1966 is described. this is believed to be the first report of this disease in the United states. many guar plants infected by P. syringae were infected also by Xanthomonas cyamopsidis. there was no pronounced inhibition between these bacterial pathogens, when they were grown together in artificial media or when inoculated together on guar leaves.

15149-68
BASE COMPOSITION OF SOLUBLE RIBONUCLEIC ACID FROM PHYTOPHTHORA INFESTANS.
O T Page M C Clark
Phytopathology 53(8)'885
Aug 1963 464.8 P56
Late blight (potatoes), Phytophthora, Potatoes, Ribonucleic acid.

15150-68
NEW MEDIUM FOR THE ISOLATION OF THIELAVIOPSIS BASICOLA ON DILUTION PLATES FROM SOIL AND RHIZOSPHERE.
G C Papavizas
Phytopathology 54(12):1475-1481, TABS.
Dec 1964 464.8 P56
Culture media, Rhizosphere, Soil fungi, Thielaviopsis basicola.

15151-68
TREE NUTRITION AND FIRE BLIGHT DEVELOPMENT.
K G Parker N S Luepschen E G Fisher
Phytopathology 51(8):557-560, TABS.
Aug 1961 464.8 P56
Fire blight (pears), Plant nutrition.

15152-68
COMPARISON PATHOGENICITY STUDIES OF FUNGI ASSOCIATED WITH CORN STALK ROT.
J L Peterson
Phytopathology 51(8):578
Aug 1961 464.8 P56
Fungi, Stalk rot (corn).

15153-68
ALBINO PERIDERMIUM HARKNESSII IN PONDEROSA PINE.
R S Peterson
Plant Dis Rep 51(4):306-309
Apr 1967 1.9 P69P
Albinism, Pinus ponderosa, Plant galls, Rust (pinus ponderosa), Tree diseases.
A white-spore race of the western gall rust fungus is widespread on ponderosa pine in the Rocky Mountain-Intermountain Area. it is believed to be autoecious on the basis of field evidence and inoculations. orange-spore Peridermium harknessii occurs within the eastern half of the albino's distribution, but is not known in the western half. relatively high temperature appears to favor germination of the hyaline aeciospores. known local concentrations of the albino are several decades old, with relatively few new galls.

15154-68
OLIGOMYCIN TREATMENTS OF OAK WILT IN NORTHERN PIN OAKS.
W E Phelps J E Kuntz
Plant Dis Rep 51(3):160-163
Mar 1967 1.9 P69P
Quercus ellipsoidalis, Tree diseases, Wilt (quercus).
University of Wisconsin, Wisconsin Conservation Department, and Nekoosa Edwards Paper Company, cooperating.
Factors influencing the effectiveness of antibiotic treatments on the oak wilt organism in vivo and subsequent disease development were studied in woodland experiments involving large oak trees. effects depended upon the method of application, time of inoculation, place of inoculation, concentration of inoculum, number of antibiotic injection points, volume of solutions introduced into the tree, concentration of antibiotic, number of treatments, and tree condition at the time of treatment.

15155-68
CROSS-TRANSMISSION STUDIES WITH CITRUS AND PRUNUS VIRUSES.
T S Pine
Plant Dis Rep 51(1):64
Jan 1967 1.9 P69P
Plant disease transmission, Prunus, Virus diseases (plants).

15156-68
INTRACELLULAR INCLUSIONS OBSERVED IN EPIDERMAL STRIPS FROM FOLIAGE OF CADANG-CADANG INFECTED COCONUT TREES IN THE PHILIPPINES.
D B Protalio
Plant Dis Rep 46(9):686-687
15 Sep 1962 1.9 P69P
Kadang-kadang (coconuts).

15157-68
TYPICAL FIELD SYMPTOMS OF PEA VIROSES PRODUCED IN GREENHOUSE BY DEFERRING INOCULATION UNTIL FLOWERING TIME OR LATER.
R Provvidenti W T Schroeder
Phytopathology 52(8):748
Aug 1962 464.8 P56
Greenhouse culture, Peas, Virus diseases (plants).

15158-68
EVALUATION OF SEED TREATMENT WITH 1,4-DICHLORO-2,5-DIMETHOXYBENZENE AS A COTTON SEEDLING DISEASE CONTROL MEASURE.
C D Ranney E G Burchfield
Plant Dis Rep 51(7):558-562
Jul 1967 1.9 P69P
Cotton, Dichloro-2,5-dimethoxybenzene, 1,4-, Seed treatment.

15159-68
PRELIMINARY NOTE ON TRANSMISSION OF A VIRUS DISEASE RESEMBLING TUNGRO OF RICE IN INDIA AND OTHER VIRUS-LIKE SYMPTOMS.
S P Raychaudhuri M D Mishra A Ghosh
Plant Dis Rep 51(4):300-301
Apr 1967 1.9 P69P
Cicadellidae, Plant disease transmission, Rice, Virus diseases (plants).
A number of virus-like disorders of paddy have been observed, such as leaf yellowing, yellow dwarf, and grassy stunt, from different parts of India. leaf yellowing symptoms with marked yellowing of the leaves is accompanied by reduction in tillering and stunting. some of the glumes were empty. the disease was transmitted by the leafhopper Nephotettix bipunctatus. the incubation and acquisition feeding period for the vector was about 5 days. no transovarial transmission was observed, but the nymphs actively transmitted the virus. no inclusion bodies were found associated with this disorder. some grasses were also observed that showed chlorosis and probably they may act as secondary hosts for the paddy virus. the other two types of virus-like symptoms, however, were not much prevalent.

15160-68
FUNGI ISOLATED FROM BLACK STEM OF ALFALFA AND THE INFLUENCE OF TEMPERATURE ON LESION FORMATION AND DISEASE SEVERITY.
B L Renfro M F Kernkamp
Phytopathology 53(7)'774-777, TABS.
Jul 1963 464.8 P56
Alfalfa, Black stem (alfalfa), Cerocospora, Colletotrichum, Cultural control (plant diseases), Fusarium, Helminthosporium, Phoma, Phytopathology, Plant temperature, Pseudoplea, Rhizoctonia, Stemphylium, Verticillium.

15161-68
LOSS IN OATS GROWN FOR FORAGE IN TEXAS DUE TO OCCURRENCE OF NEW RACES OF CROWN RUST.
L Reyes M C Futrell
Plant Dis Rep 46(12):835-837
15 Dec 1962 1.9 P69P
Crop losses, Crown rust (oats), Forage plants.

15162-68
A BIOASSAY FOR VOLATILE TOXICANTS FROM FUNGICIDES IN SOIL.
L. T. Richardson D E Munnecke
Phytopathology 54(7):836-839
Jul 1964 464.8 P56
Biological assay, Chemical control (plant diseases), Fungicides, Volatile substances.

15163-68
THE ROLE OF SEED TRANSMISSION IN THE EPIDEMIOLOGY OF BEAN MOSAICS IN CENTRAL WASHINGTON.
R S Robertson Jr
Plant Dis Rep 46(2):71-72
15 Feb 1962 1.9 P69P

Mosaic (beans), Washington.

15164-68
VECTOR SPECIFICITY OF THREE STRAINS OF BARLEY YELLOW DWARF VIRUS.
W F Rochow
Phytopathology 51(8):578-579
Aug 1961 464.8 P56
Yellow dwarf (barley).

15165-68
THE BIOLOGY AND ECOLOGY OF DENDROCTONUS VALENS LEC., AND THE BIOLOGY, ECOLOGY, AND CONTROL OF DENDROCTONUS FRONTALIS (MEXICANS)ZIMM IN CENTRAL MEXICO(COLEOPTERAI SCOLYTIDAE).
W E Rose
Diss Abstr Sect B 27_11)04181B-4182B
May 1967 Z5055.U49D53
Beneficial insects, Carbaryl, Dendroctonus frontalis, Dendroctonus valens, Ethylene dibromide, Insect biology, Insect ecology, Insect outbreaks, Insect rearing, Ips bonanseai, Ips cribricollis, Lindane, Malatbion, Pinus, Temperature.

15166-68
EFFECT OF IRRIGATION METHOD AND FREQUENCY ON DEVELOPMENT OF PHYTOPHTHORA INFESTANS ON POTATOES UNDER ARID CONDITIONS.
J Rotem J Palti E Ravitz
Plant Dis Rep 46(3):145-149
15 Mar 1962 1.9 P69P
Irrigation, Phytophthora infestans.

15167-68
TEMPERATURE CONVERSION OF RUST RESPONSE OF BEAN.
R D Schein
Phytopathology 51(7):486-488
Jul 1961 464.8 P56
Rust (beans), Temperature.

15168-68
STING NEMATODE ON GRAPE CUTTINGS IN FLORIDA.
N C Schenck J A Mortensen L R Stover
Plant Dis Rep 46(6):446-447
15 Jun 1962 1.9 P69P
Grapes, Plant diseases, Plant nematodes.

15169-68
PINE CONE RUST IN THE HIGHLANDS OF GUATEMALA.
E Schieber
Plant Dis Rep 51(1):44-46
Jan 1967 1.9 P69P
Guatemala, Pine cones, Rust (pinus).

15170-68
A DIFFERENCE IN THE TRANSLOCABILITY OF TWO VIRUSES IN BEAN PLANTS.
I R Schneider
Phytopathology 52(8):751
Aug 1962 464.8 P56
Beans, Mosaic (beans), Plant translocation, Ring spot (tobacco), Virus diseases (plants).

15171-68
BETA-GLUCOSIDASE ACTIVITY IN ERWINIA AMYLOVORA AND PSEUDOMONAS SYRINGAE.
M N Schroth D C Hildebrand
Phytopathology 54(8):906
Aug 1964 464.8 P56
Erwinia amylovora, Glucosidases.

15172-68
POPULATION TRENDS AND MOVEMENT OF CORYNEBACTERIUM FLACCUMFACIENS VAR. AURANTIACUM IN TOLERANT AND SUSCEPTIBLE BEANS.
M L Schuster D P Coyne Kamla Singh
Plant Dis Rep 48(10):823-827
15 Oct 1964 1.9 P69P
Beans, Corynebacterium, Population.

15173-68
STUDIES ON THE ISOLATION OF THE STRAWBERRY LEAF SCORCH PATHOGEN DIPLOCARPON EARLIANA.
D H Scott D Powell
Phytopathology 54(8):906-907
Aug 1964 464.8 P56
Leaf scorch (strawberries), Strawberries.

15174-68
SEROLOGICAL STUDIES OF RED NODE AND POD MOTTLE VIRUSES.
H A Scott M Vincent W J Zaumeyer
Phytopathology 51(11):755-758
Nov 1961 464.8 P56
Pod mottle (beans), Red node (beans), Serological tests.

15175-68
DETECTION OF POTATO VIRUS X IN TUBERS BY THE BENTONITE FLOCCULATION TEST.
H A Scott R P Kahn J Bozicevich M M Vincent
Phytopathology 54(10):1292-1293
Oct 1964 464.8 P56
Bentonite, Flocculation.

15176-68
BACTERIAL BLACK SPOT OF RADISH.
R H Segall J J Smoot
Phytopathology 52(10):970-973
Oct 1962 464.8 P56
Bacterial black spot (radishes), Radishes.

15177-68
INTRACELLULAR LABELING OF TMV ANTIGEN WITH FERRITIN-ANTIBODY CONJUGATE.
T A Shalla
Phytopathology 54(8):907
Aug 1964 464.8 P56
Antibodies, Labeling, Mosaic (tobacco).

15178-68
EFFECT OF PENTACHLORONITROBENZENE.
M N Shatla
Agr Chem 20(11)'103
Nov 1965 381 AG8
Cotton, Pentachloronitrobenzene, Rhizoctonia solani.

15179-68
THE TRANSOVARIAL TRANSMISSION OF WOUND-TUMOR VIRUS.
S Shelley
Phytopathology 55(3):324-327, BIBL. 327
Mar 1965 464.8 P56
Agallia, Alfalfa, Plant disease transmission.

15180-68
COMPARATIVE EFFECTIVENESS OF SOME EQUIPMENT AND METHODS OF MEASURING LOW CONCENTRATIONS OF OZONE.
G Silber
Plant Dis Rep 46(3):137-139
15 Mar 1962 1.9 P69P
Ozone.

15181-68
THE EFFECT OF GROWTH SUBSTANCES ON VERTICILLIUM WILT OF.
A K Sinha R K S Wood
Ann Appl Biol 60 (1): 117-128 REF
Aug 1967 442.8 AN72
Gibberellic acid, Maleic hydrazide, Plant disease resistance, Plant regulators, Tomatoes, Verticillium albo-atrum, Wilt (tomatoes).

15182-68
DISTRIBUTION OF WOUND-TUMOR VIRUS ANTIGENS IN INTERNAL ORGANS OF AN INSECT VECTOR.
R C Sinha D V R Reddy
Phytopathology 54(8):908
Aug 1964 464.8 P56
Antigens, Immunochemistry, Insect vectors.

15183-68
CALCIUM NITRATE FOR FIELD CONTROL OF TOMATO SOUTHERN BLIGHT IN SOUTH CAROLINA.
W R Sitterly
Plant Dis Rep 46(7):492-494
15 Jul 1962 1.9 P69P
Calcium nitrate, Chemical control (plant diseases), Southern blight (tomatoes).

15184-68
THE EFFICACY OF VARIOUS FUMIGANTS IN CONTROLLING VERTICILLIUM WILT IN SOUTH-CENTRAL WASHINGTON.
C B Skotland
Agr Chem 20(5)'97
May 1965 381 AG8
Fumigants, Fungus, Soil fumigation.

15185-68
A SEED-BORNE BEAN VIRUS OF WIDE HOST RANGE.
C B Skotland D W Burke
Phytopathology 51(8)565-568

20 15186-68

Aug 1961 464.8 P56
Beans, Seed-borne plant diseases.

15186-68
A SURVEY OF GREEN PLANTS FOR ANTIMICROBIAL SUBSTANCES.
B C Smale E A Wilson H L Keil
Phytopathology 54(7):748
Jul 1964 464.8 P56
Antibiotics, Plant biochemistry, Plant protective devices.

15187-68
SEASONAL FLUCTUATIONS IN SUSCEPTIBILITY OF YOUNG ELM SEEDLINGS TO DUTCH ELM DISEASE.
E B Smalley
Phytopathology 53(7):846-853, TABS., PL.
Jul 1963 464.8 P56
Crop varieties, Dieback (ulmus), Plant disease resistance, Seedlings, Ulmus.

15188-68
REDUCTION OF PEACH DECAYS BY HYDROCOOLING WITH CHEMICAL SOLUTIONS AND CHEMICALLY TREATED ICE.
W L Smith Jr W H Redit
Plant Dis Rep 46(4):221-226, TABS
15 Apr 1962 1.9 P69P
Chemical control (plant diseases), Ice, Peaches.

15189-68
REPELLANCY OF REFLECTIVE ALUMINUM TO TRANSIENT APHID VIRAL VECTORS.
F F Smith G V Johnson E P Kahn A Bing
Phytopathology 54(7):748
Jul 1964 464.8 P56
Aluminum, Insect repellents, Insect vectors, Plant protective devices, Virus diseases (plants).

15190-68
URIDINE-H3 INCORPORATION IN TOBACCO INFECTED BY TOBACCO MOSAIC VIRUS.
S H Smith D E Schlegel
Phytopathology 54(12):1437
Dec 1964 464.8 P56
Mosaic (tobacco), Plant metabolism, Tobacco.

15191-68
GUMMY STEM BLIGHT RESISTANCE OF INTRODUCED WATERMELONS.
G Sowell Jr G E Pointer
Plant Dis Rep 46(12):883-885
15 Dec 1962 1.9 P69P
Gummy stem blight (watermelons).

15192-68
EFFECT OF REMOVING THE TERMINAL BUD OF BEAN PLANTS UPON PROTEIN CHANGES AFTER INFECTION BY THE BEAN RUST FUNGUS.
E C Staples
Phytopathology 54(8):909
Aug 1964 464.8 P56
Beans, Rust (beans).

15193-68
GENETICS OF RESISTANCE TO ERYSIPHE POLYGONI IN TRIFOLIUM PRATENSE.
J E Stavely E W Hanson
Phytopathology 57(2):193-197
Feb 1967 464.8 P56
Erysiphe, Fungus diseases (plants), Plant disease resistance, Red clover.

15194-68
EFFECTS OF TEMPERATURE AND LIGHT ON PLANT SUSCEPTIBILITY TO CUCUMBER MOSAIC VIRUS BY APHID TRANSMISSION.
M W Stimmann K G Swenson
Phytopathology 57(10):1072-1073
Oct 1967 464.8 P56
Aphididae, Mosaic (cucumbers), Plant temperature.

15195-68
STEMPHYLIUM RAY SPECK OF CHRYSANTHEMUM.
J Tammen
Phytopathology 53(7):749-754, BIBL., PL.
Jul 1963 464.8 P56
Chrysanthemum, Epidemiology, Pathogenesis, Ray speck (chrysanthemum), Stemphylium.

15196-68
TOBACCO FLECK CONTROLLED WITH ANTIOZONANTS.
G S Taylor S Rich
Phytopathology 51(8):579
Aug 1961 464.8 P56
Tobacco.

15197-68
APPLE VARIETY RESISTANCE TO HELMINTHOSPORIUM LEAFSPOT.
J Taylor
Plant Dis Rep 48(12):954
15 Dec 1964 1.9 P69P
Apples, Helminthosporium.

15198-68
TRANSMISSION OF TOBACCO MOSAIC VIRUS IN TOMATO SEED.
R H Taylor R G Grogan K A Kimble
Phytopathology 51(12):837-842, BIBL. 842, TABS.
Dec 1961 464.8 P56
Mosaic (tobacco), Plant disease transmission, Tomatoes.

15199-68
A SECOND PATHOGENIC RACE OF PSEUDOMONAS SESAMI.
C A Thomas E G Orellana M L Kinman G W Rivers
Plant Dis Rep 46(4):248-250
15 Apr 1962 1.9 P69P
Pathogenesis, Psendomonas sesami.

15200-68
STUDIES ON THE HOST RANGE OF WATERMELON MOSAIC VIRUS IN HAWAII.
H H Toba
Plant Dis Rep 46(6):409-410
15 Jun 1962 1.9 P69P
Mosaic (watermelons).

15201-68
FACTORS AFFECTING FIELD PERFORMANCE OF NICKEL SALT PLUS DITHIOCARBAMATE FUNGICIDE MIXTURES FOR THE CONTROL OF WHEAT RUSTS.
Phytopathology 54(8):999-1008, TABS.
Aug 1964 464.8 P56
Chemical control (plant diseases), Fungicides, Nickel compounds, Rust (wheat).

15202-68
LONGEVITY OF XANTHOMONAS MALVACEARUM IN DRIED COTTON PLANTS AND ITS SIGNICANCE IN DISSEMINATION OF THE PATHOGEN ON SEED.
Phytopathology 54(8):1009-1011
Aug 1964 464.8 P56
Cotton, Seeds, Xanthomonas malvacearum.

15203-68
NITROGEN AS A FACTOR IN THE DEVELOPMENT OF EXOCORTIS OF CITRUS.
Phytopathology 54(8):968-969
Aug 1964 464.8 P56
Citrus, Exocortis (citrus), Nitrogen.

15204-68
POTENTIAL PATHOGENICITY OF PYTHIUM ISOLATES FROM FOREST NURSERIES.
O Vaartaja P J Salisbury
Phytopathology 51(8):505-507
Aug 1961 464.8 P56
Forest nurseries, Pythium.

15205-68
FUNGI ASSOCIATED WITH A WOOD WASP IN DYING PINES IN TASMANIA.
O Vaartaja J King
Phytopathology 54(8):1031-1032
Aug 1964 464.8 P56
Hymenoptera, Pinus, Wood destroying fungi.

15206-68
EVIDENCE FOR A CHEMICAL BASIS OF RESISTANCE OF LIMA BEAN PLANTS TO DOWNY MILDEW.
J E Valenta B D Sisler
Phytopathology 52(10):1030-1037, BIBL. 1037
464.8 P56
Downy mildew (lima beans), Lima beans, Plant biochemistry, Plant disease resistance.

15207-68
LESION MATURATION, FUNGAL DEVELOPMENT, AND DISTRIBUTION OF ENDOPOLYGALACTURONASE AND CELLULASE IN RHIZOCTONIA INFECTED BEAN HYPOCOTYL TISSUES.
B D Van Etten D P Maxwell D F Bateman
Phytopathology 57(2):121-126
Feb 1967 464.8 P56
Beans, Cellulase, Rhizoctonia, Tissues.

15208-68
FAILURE TO CONFIRM THE SYNTHESIS OF TMV IN A CELLFREE SYSTEM.
A Van Kammen W N Takahashi

Phytopathology 54(12):1437
Dec 1964 464.8 P56
Extracellular suhstances, Mosaic (tohacco).

152D9-68
OCCUBRENCE OF TWO BACTEBIAL DISEASES ON NEW HOSTS IN ISBAEL.
Z Volcani
Plant Dis Bep 46(12):893
15 Dec 1962 1.9 P69P
Bacterial diseases (plants), Israel.

15210-68
BACTEBIAL SPOI DISEASE OF TOMATOES AND PEPPEBS IN ISBAEL.
Z Volcani
Plant Dis Bep 46(3):175
15 Mar 1962 1.9 P69P
Bacterial spot (peppers), Bacterial spot (tomatoes), Israel.

15211-68
FILAMENT FCBM OF EBWINIA AMYLOVOBA.
J Voros
Phytopathology 54(8):911
Aug 1964 464.8 P56
Erwinia amylovora.

15212-68
BESULTS OF CHEMICAL DBENCHES IN THE CONTBOL OF SPRING DEAD SPOT OF BEBMUDA GBASS.
D F Wadsworth
Phytopathology 51(9):646
Sep 1961 464.8 P56
Cynodon dactylon, Spring dead spot (cynodon dactylon).

15213-68
EBADICATION OF SOIL FUNGI BY A COMBINATION OF CBOP BESIDUE, FLOODING, AND ANAEBOBIC FEBMENTATION.
B D Watson
Phytopathology 54(12):1437-1438
Dec 1964 464.8 P56
Fermentation, Floods, Fungicides, Plant residues, Soil fungi.

15214-68
SCOTYLID VECTOBS OF THE DUTCH ELM DISEASE IN ONTABIO.
W Y Watson W L Sippell
Can Entomol 93(5):403-405
May 1961 421 C16
Dieback (ulmus), Insect vectors, Ontario.

15215-68
TBE OCCUBBENCE AND DECLINE OF DOWNY MILDEW ON LIMA BEANS IN THE MIDDLE ATLANTIC STATES.
B E Wehster J MacLeod J W Beuberger
Phytopathology 54(7):749
Jul 1964 464.8 P56
Downy mildew (lima heans), Fungus diseases (plants), Lima heans, Mycology.

15216-68
TBE OBCHABD DEVELOPMENT OF PEACH POWDEBY MILDEW.
A B Weinhold
Phytopathology 51(7):478-481
Jul 1961 464.8 P56
Powdery mildew (peaches), Sphaerotheca pannosa.

15217-68
METABOLITE CHANGES INDUCED BY CUCUMBEB MOSAIC VIBUS IN BESISTANT AND SUSCEPTIBLE STBAINS OF COWPEA.
G W Welkie S F Yang G W Miller
Phytopathology 57(5):472-475
May 1967 464.8 P56
Cowpeas, Mosaic (cucumhers), Plant metaholism.

15218-68
TBANSMISSION OF DCWNY MILDEW OF LIMA BEANS BY SLUGS.
B E Wester B W Goth B E Webh
Phytopathology 54(7):749
Jul 1964 464.8 P56
Downy mildew (lima heans), Lima heans, Slugs.

15219-68
EFFECT CF GBOWTH-BEGULATING AND OTHEB COMPOUNDS ON BACTEBIAL SPOT CF PEPPEB.
F J Wiebel D F Crossan D J Fieldhouse
Plant Dis Bep 51(4):320-322
Apr 1967 1.9 P69P
Bacterial diseases (plants), Bacterial spot (redpeppers), Mineral oil, Oils, Plant regulators, Bedpeppers (vegetable), Saccharin, Succinic acid, 2,2-dimethylhydrazide.
Fertility levels, hactehicidal and non-hactericidal chemicals, and growth-retarding compounds were evaluated in the field for control of pepper bacterial spot and effect on plant morphology and yield. no treatment significantly reduced leaf fall although certain rates of N-dimethyl-amino succinamic acid (Alar), alone or in combination with slow release nitrogen, significantly reduced the severity of leaf infection. high rates of Alar significantly rednced fruit infection.

1522D-68
SEASONAL VABIATION IN THE INCIDENCE OF BADISH YELLOWS AND EFFECT OF CBOP ROTATION ON PLANT SURVIVAL AND YIELD.
J D Wilson
Plant Dis Bep 46(2):124-127
15 Feb 1962 1.9 P69P
Crop rotation, Plant disease resistance.

15221-68
IN VITBO INCBEASE IN VIBUS INFECTIVITY. II.
C E Yarwood
Plant Dis Rep 51(3):178-182 BEF
Mar 1967 1.9 P69P
Adenosine triphosphates, Caffeine, Magnesium silicate, Mosaic (sugar heets), Potassium phosphate, Sncrose, Sugar heets, Virus diseases (plants).
When young leaves of sugarheet systemically infected with cucumher mosaic virus were ground with K2SO3 and water, diluted to D.5 percent leaf tissue and 0.1 percent K2SO3, used as inoculum immediately and after time intervals, the infectivity of this inoculum increased by an average of 6-fold in 20 minutes and as much as 132-fold in one test. the addition of caffeine, sucrose, magnesinm silicate, and adenosine triphosphate (ATP) usually increased hoth the initial infectivity and the in vitro increase in infectivity of K2SO3-virus mixtures. the infectivity of such preparations usually began to decrease within 3 honrs of preparation hut the presence of ATP delayed this decrease. no claim of increase in virus is made.

15222-68
INFLUENCE OF IBBIGATION AND SOIL INFESTATION WITB STBAINS OF PHYTOPHTHOBA DBESCHLEBI ON ROOT BOT BESISTANCE OF SAFFLOWEB.
D E Zimmer A L Urie
Phytopathology 57(1D):1D56-1059
Oct 1967 464.8 P56
Plant disease resistance, Boot rot (safflower).

Arthropods

15223-68
THREE PLANS FOB USING ACABICIDES TO CONTBOL MITES ON APPLE.
Asquith
J Econ Entomol 53(5)'735-737
Oct 1960 421 J822
Acaricides, Apples, Aramite, Dicofol, Mites, Tetradifon.

15224-68
INTEBFEBENCE WITB THE BIOLOGICAL CONTBOL OF COTTONY-CUSHION SCALE BY INSECTICIDES AND ATTEMPTS TO BE-ESTABLISB A FAVOBABLE NATURAL BALANCE.
B B Bartlett C F Lagace
J Econ Entomol 53(6)'1055-1058, 12 BEFS.
Dec 1960 421 J822
Biological control (insects), California, Citrus, DDT, Icerya, Malathion, Parathion, Rodolia.

15225-68
1967 INSECTICIDE RECOMMENDATIONS; PEACH INSECT CONTBOL (COMMEBCIAL).
M L Bohh
Va Polytech Inst Ext Circ 1007,4 P
Dec 1966 275.29 V81C
Chemical control (insects), Extension work, Insecticides.

15226-68
CONTROL OF THE EASTERN TENT CATERFILLAB, MALACOSOMA AMEBICANUM (FABBICIUS), BY DISTRIBUTION OF SPOBES OF TWO SPECIES OF CLOSTRIDIUM.
G E Bucher
J Invertebrate Pathol 3(4):439-445, 3 BEFS.
Dec 1961 421 JH26

20 15227-6B

Biological control (insects), Clostridium malacosomae, Fungi, Malacosoma americanum, Prunus.

15227-6B
SOIL TREATMENTS WITH BROADCAST OR BAND APPLICATIONS OF ORGANOPHOSPHORODS OF CARBAMATE INSECTICIDES FOR PREVENTION OF WIREWORM DAMAGE TO POTATOES.
R H Burrage J A Menzies E Zirk
J Econ Entomol 60(6):1489-1492
Dec 1967 421 JB22
Carbamates, Elateridae, Insecticide application, Insecticides, Plant injuries, Potatoes, Soil treatments.
Abstract

15228-6B
CONTROL OF THE PICKLEWORM ON CUCURBITS.
T D Canerday
J Econ Entomol 60(6):1705-1708 REF
Dec 1967 421 JB22
Carbaryl, Chemical control (insects), Crop yields, Cucumbers, Diaphania nitidalis, Lindane, Squash.
Abstract

15229-6B
RELATIVE EFFECTIVENESS OF RESISTANCE OF FIELD CORN TO THE EUROPEAN CORN BORER, PYRAUSTA NUBILALIS, IN CROP PROTECTION AND IN POPULATION CONTROL.
B C Chiang F G Holdaway
J Econ Entomol 53(5)'918-924, 10 REFS., 9 TABS.
Oct 1960 421 JB22
Corn, Insect populations, Plant insect resistance, Pyrausta.

15230-6B
DISTRIBUTION OF RIDRIN IN THE FOLIAGE OF TREATED TREES.
D E Donley
J Econ Entomol 60(6):1583-1585
Dec 1967 421 JB22
Bidrin, Forest insects, Metabolites, Systemic insecticides, Trees.
Abstract:
daphnia pulex was used as the bioassay organism. distribution patterns were significantly better following root implants than following trunk implants.

15231-6B
BOLL WEEVIL SURVIVAL IN CAROLINAS HIGHER THAN IN 1961.
K Dorward
Agr Chem 17(5)'60, 1D0
May 1962 3B1 AGB
Acyrthosiphon, Anthonomus grandis, Chorizagrotis, Hypera, Schizaphis.

15232-6B
VARIETY OF SOYBEAN INSECTS ARE ACTIVE IN SEVERAL STATES.
K Dorward
Agr Chem 17(11)'119, 161
Nov 1962 3B1 AGB
Heliothis zea, Mites, Musca, Soybeans, Spodoptera.

15233-6B
EFFECT OF SUGARCANE BORER INFESTATION ON THE YIELD AND GRADE OF CORN.
E H Floyd D F Clower L F Mason
J Econ Entomol 53(5)'935-937, 1 REF., 4 TABS.
Oct 1960 421 JB22
Corn, Crop yields, Diatraea, Endrin, Louisiana, Rice, Sorghum, Sugarcane.

15234-6B
PRELIMINARY LABORATORY TESTS UTILIZING BEAUVERIA BASSIANA (BALSAMO) VUILLEMIN ON CALOMYCTERUS SETARIUS ROELOFS.
R D Frye E S Raun
J Invertebrate Pathol 3(3):332-333
Sep 1961 421 JB26
Beauveria bassiana, Calomycterus setarius, Insect pests, Parasitism, Sitona cylindricollis.

15235-66
GYPSY MOTH DEFOLIATION.
J W Gentry
Agr Chem 20(12)'70
Dec 1965 3B1 AGB
Defoliation, Northeastern United States, Porthetria.

15236-6B
SPOTTED ALFALFA APHID SPREADS.
J W Gentry
Agr Chem 20(12)'68
Dec 1965 3B1 AGB
Alfalfa, Therioaphis, United States.

15237-6B
SPICARIA RILEYI (FARLOW) CHARLES, AN ENTOMOGENOUS FUNGUS OF TRICHOPLUSIA NI HUEBNER).
L W Getzin
J Invertebrate Pathol 3(1):2-10, 7 REFS., 5 TABS.
Mar 1961 421 JB26
Biological control (insects), Entomogenous fungi, Parasitism.

15238-6B
BIOLOGY OF THE BLACK CHERRY APHID IN THE WILLAMETTE VALLEY, OREGON.
J E Gilmore
J Econ Entomol 53(4)'659-661
Aug 1960 421 JB22
Aphididae, Aphidins, Biology, Cherries, Cycloneda, Ephedrus, Hippodamia, Oregon, Syrphus.

15239-6B
SAFETY OF WILDLIFE IS IMPORTANT TO PLANNERS OF GNAT-CONTROL PROGRAM.
W Hazeltine
Agr Chem 17(12)'12-14, 76
Dec 1962 3B1 AGB
Diptera, DDT, Insect control, Parathion, Pesticide residues, Wildlife.

15240-6B
THE CONTROL OF POULTRY LICE AND MITES WITH SEVERAL ORGANIC INSECTICIDES.
R A Hoffman
J Econ Entomol 53(1)'160-162, BIBL.
Feb 1960 421 JB22
Carbaryl, Coumaphos, Dicapthon, Mites, Poultry.

15241-6B
INSECTICIDAL CONTROL OF PAEDOGENETIC CECID LARVAE IN MOSS-ROOM BEDS. I. INCORPORATION OF INSECTICIDES INTO COMPOST. II. INCORPORATION OF INSECTICIDES IN THE CASING LAYER.
N W Bussey I J Wyatt J T Hughes
J Sci Food Agr 12(1)'1-2D-7
Jan 1961 3B2 S012
Aldrin, Benzene hexachloride, Mayetiola, Mushrooms.

15242-6B
THE INFLUENCE OF PHYSICAL STRESS ON GROWTH AND NUCLEAR POLYHEDROSIS OF TRICHOPLUSIA NI (BUERNER).
R P Jacques
J Invertebrate Pathol 3(1):47-54, 16 REFS.
Mar 1961 421 JB26
Insect physiology, Polyhedroses, Stress.

15243-68
OVERWINTERING IN PEMPHIGUS BURSARIUS (L.).
F D Judge
Nature 216(5119):
09 Dec 1967 472 N21
Hibernation, Insect rearing, Pemphigus bursarius.

15244-6B
A DECLINE CONDITION IN PEARS INDUCED BY PEAR PSYLLA.
R L Lindner E C Burts N R Benson
Plant Dis Rep 46(1):59-6D
15 Jan 1966 1.9 P69P
Psylla pyricola.

15245-6B
BARK BEETLE MORTALITY IN PRECOMMERCIAL HERBICIDE THINNINGS OF WESTERN HEMLOCK.
J B McGhehey W P Nagel
J Econ Entomol 60(6):1572-1574
Dec 1967 421 JB22
Cacodylic acid, Chemical control (insects), Forest insects, Herbicides, Insect mortality, Thinning (trees), Tsuga.
Abstract

15246-6B
PRELIMINARY STUDY ON SOME OF THE FACTORS AFFECTING CONTROL OF WESTERN CORN ROOTWORM LARVAE WITH SOIL INSECTICIDES.
G J Musick M L Fairchild
J Econ Entomol 60(6):1522-1525
Dec 1967 421 JB22
Chemical control (insects), Corn, Diabrotica virgifera, Larvae, Phorate, Soils.
Abstract

15247-6B
GRASSHOPPER DAMAGE ON SHORT-GRASS RANGELAND OF THE SAN CARLOS APACHE INDIAN RESERVATION, ARIZONA.
N J Nerney
J Econ Entomol 53(4)'640-646, TABS.

Aug 1960 421 J822
Arizona, Grasses, Melanophus, Plant injuries.

15248-68
EFFECTS OF MULCHING AND NITROGEN ON CORN BORER SUSCEPTIBILITY IN CORN.
G P Offerman A J Pappelis J P Vavra
Phytopathology 57(10):1031-1033
Oct 1967 464.8 P56
Corn, Mulching, Nitrogen, Ostrinia.

15249-68
EFFECT OF SOIL TREATMENTS OF HEPTACHLOR AND PARATHION ON PREDATORS AND PARASITES OF ROOT MAGGOTS ATTACKING RUTABAGAS ON PRINCE EDWARD ISLAND.
D C Read
J Econ Entomol 53(5):932-935, 12 REFS.
Oct 1960 421 J822
Aleochara, Heptachlor, Hylemya, Parathion, Prince Edward Island, Rutabagas, Soil treatments.

15250-68
EFFECTIVENESS OF VARIOUS FORMULATIONS OF FIVE INSECTICIDES ON INSECTS INFESTING DOUGLAS-FIR LOGS.
J A Rudinsky L C Terriere D C Allen
J Econ Entomol 53(5):949-953, 14 REFS., 3 TABS.
Oct 1960 421 J822
Carbaryl, Dendroctonus, Endosulfan, Endrin, Heptachlor, Lindane, Logs, Pseudotsuga.

15251-68
LINDANE IN DIESEL OIL PREVENTS WESTERN PINE BEETLE ATTACKS FOR AT LEAST ONE YEAR.
R R Smith
J Econ Entomol 60(6):1746-1747
Dec 1967 421 J822
Dendroctonus brevicomis, Diesel fuels, Forest insects, Lindane, Oils.
Abstract:
results suggest that 2.5 per cent lindane in diesel oil will effectively prevent successful western pine beetle adult attack for at least one year on standing trees. further testing will be needed to determine any adverse effects of an oil spray on living trees.

15252-68
ESTIMATION OF MARINE-BORER ATTACK ON WOODEN SURFACES.
C C Walden I V F Allen P C Trussell
J Fish Res Board Can 24(2):261-272
Feb 1967 442.9 C16J
Marine borers, Wood.
Abstract

15253-68
A FUNGUS DISEASE OF THE SALT-MARSH CATERPILLAR IN ARIZONA.
G P Wene L W Sheets
J Econ Entomol 53(5):957, 2 REFS.
Oct 1960 421 J822
Arizona, Cotton, Estigmene, Fungus diseases (insects).

Nematodes

15254-68
STIMULATION OF HATCHING OF THE POTATO-ROOT EELWORM HETERODERA ROSTOCHIENSIS BY ION EXCHANGE RESINS.
C Ellenby L Smith
Nature 215(5101), 666
05 Aug 1967 472 N21
Heterodera rostochiensis, Ion exchange resins, Plant nematodes, Potatoes.

15255-68
DETERMINATION OF NEMATODE MORTALITY.
L M Fenner
Plant Dis Rep 46(5):383
15 May 1962 1.9 P69P
Mortality, Plant nematodes.

15256-68
FIELD TRIALS OF NEW NEMATOCIDES IN 1960 FOR CONTROLLING ROOT-KNOT NEMATODES.
J M Good
Phytopathology 51(9):643
Sep 1961 464.8 P56
Nematocides, Plant nematodes.

15257-68
CONTROL OF PLANT-NEMATODES AND WEEDS IN HOLLY NURSERIES.
F A Haasis J N Sasser
Plant Dis Rep 46(5):328-332, TABS
15 May 1962 1.9 P69P
Chemical control (plant diseases), Ilex, Plant nematodes, Weed control.

15258-68
CHEMOTHERAPEUTIC CONTROL OF A ROOT-KNOT NEMATODE.
A W Helton
Agr Chem 20(8):38
Aug 1965 381 AG8
Dimethoate, Drug therapy, Meloidogyne, Potatoes.

15259-68
PATHOGENICITY OF THE STUBBY ROOT NEMATODE TO ONION.
J K Hoff W F Mai
Plant Dis Rep 46(1):24-25
15 Jan 1962 1.9 P69P
Onions.

15260-68
A METHOD FOR ASSAYING NEMATOCIDAL ACTIVITY OF EXPERIMENTAL CHEMICALS.
D E Johnson Bert Lear
Plant Dis Rep 46(10):742-743
15 Oct 1962 1.9 P69P
Chemical control (nematodes), Nematocides.

15261-68
SOIL FUMIGATION BY INJECTION AND IRRIGATION FOR THE CONTROL OF NEMATODES ON HOPS.
A R Maggenti
Plant Dis Rep 51(9):794-798
Sep 1967 1.9 P69P
Chemical control (nematodes), Dibromo-3-chloropropane, 1,2-, Hops, Injections, Irrigation, Meloidogyne, Plant nematodes, Soil fumigation, Xiphinema americanum.
Field trials with 1,3-d and DBCP were designed to study the efficacy of preplanting fumigation, the length of time of effectiveness of preplanting fumigation, and the efficacy of a postplanting fumigation in the second year. the best results were obtained when a preplanting fumigation with 60 gallons per acre of 1,3-d was followed in 1 year by DBCP at 2 1/2 gallons per acre in the first irrigation.

15262-68
ELIMINATION OF ROOT-KNOT NEMATODES FROM INFESTED SWEETPOTATO ROOTS AND PLANTS.
W J Martin
Plant Dis Rep 46(1):21-23
15 Jan 1962 1.9 P69P
Sweetpotatoes.

15263-68
CONTROL OF NEMATODES ON BLUE SPRUCE.
P Miller
Agr Chem 20(12):67
Dec 1965 381 AG8
Dibromo-3-chloropropane, 1,2-, Nematodes, Picea parryana.

15264-68
EFFECT OF FUNGICIDES ON THE LARVAL EMERGENCE OF THE TOBACCO CYST NEMATODE.
P M Miller G S Taylor E M Stoddard
Phytopathology 51(8):577-578
Aug 1961 464.8 P56
Fungicides, Larvae.

15265-68
HOST-PARASITE RELATIONSHIPS OF GARDEN BALSAM AND SOME NEMATODES.
R A Odihirin W R Jenkins
Phytopathology 54(7):748
Jul 1964 464.8 P56
Balsams, Nematology, Parasitology, Plant nematodes, Tree pathology.

15266-68
OBSERVATIONS ON COTTON ROOT-KNOT NEMATODE IN GRAIN SORGHUM IN WEST TEXAS.
C C Orr
Plant Dis Rep 51(1):29
Jan 1967 1.9 P69P
Root knot (cotton), Sorghum, Texas.

20 15267-68

15267-68
SPECIES OF ROOT-LESION NEMATODES COMMONLY ASSOCIATED WITH ECONOMIC CROPS IN THE DELTA OF THE U.A.R.
E A Oteifa
Plant Dis Rep 46(8):572-575
15 Aug 1962 1.9 P69P
Plant nematodes.

15268-68
NEW NEMATOCIDES.
V G Perry
Agr Chem 22(10):36-37
Oct 1967 381 AG8
Carbamates, Chemical control (nematodes), Nematocides, Organophosphorus compounds, Pesticide application, Plant nematodes.
Abstract:
dasinit (Bay 25141), Sarolex (Diazinon), Zinophos, Bay 68138, Du Nema (TH 285N), Lannate, Mocap (V-C 9-104), NIA 10242, Temek, TH 336N are briefly described.

15269-68
PLANT- PARASITIC NEMATODES ASSOCIATED WITH SHORTLEAF PINE SHOWING SYMPTOMS OF LITTLELEAF.
J L Ruehle
Plant Dis Rep 46(10):710-711
15 Oct 1962 1.9 P69P
Little leaf (pinus), Pinus, Plant nematodes.

1527D-68
PRELIMINARY STUDIES ON THE CONTROL OF NEMATODES IN OUTDOOR ROSE PLANTINGS.
A P Schindler T J Henneberry
Plant Dis Rep 46(8):610-613, BIBL. 612-613
15 Aug 1962 1.9 P69P
Chemical control (plant diseases), Plant nematodes.

15271-68
A NEW DISEASE OF SWAMP TUPELO.
E R Toole
Phytopathology 51(9):646
Sep 1961 464.8 P56
Nyssa, Swamps.

15272-68
INFLUENCE OF OXYGEN SUPPLY ON SURVIVAL OF PLANT PARASITIC NEMATODES IN SOIL.
S D Van Gundy L H Stolzy T E Szuszkiewicz R L Rackham
Phytopathology 52(7):628-632, BIBL. 632, TABS.
Jul 1962 464.8 P56
Oxygen, Plant nematodes, Soils.

15273-68
TRICHODORUS CHRISTIEI AS A VECTOR OF POTATO CORKY RINGSPOT (TOBACCO RATTLE) VIRUS.
C H Walkinshaw G D Griffin R R Larson
Phytopathology 51(11):806-808
Nov 1961 464.8 P56
Corky ringspot (potatoes), Rattle disease (tobacco).

15274-68
RECORD OF TWO LONGIDORUS SPECIES FROM SUDAN.
A M Yassin
Plant Dis Rep 51(1):30
Jan 1967 1.9 P69P
Malva, Mentha spicata, Sudan.

15275-68
A NEMATODE (MELOIDODERA SP) ON DOUGLAS-FIR MYCORRHIZAE.
R Zak
Plant Dis Rep 51(4):264
Apr 1967 1.9 P69P
Mycorrhiza, Plant nematodes, Pseudotsuga menziesii.
Abstract:
a new nematode, Meloidodera sp., was observed infecting mycorrhizae of a 20-inch dbh Pseudotsuga menziesii in western Oregon. only two of at least six morphologically distinct mycorphizae on the root system were infected.

Weeds

15276-68
FOOD-PLANT SPECTRUM AND ELIMINATION OF DISEASE OF CINNABAR MOTH LARVAE, HYPOCRITA JACOBAEAE (L.) (LEPIDOPTERA: ARCTIIDAE).
G E Bucher P Harris
Can Entomol 93(10):931-936
Oct 1961 421 C16
Biological control (weeds), Insect diseases, Insect nutrition, Larvae, Moths, Senecio jacobaea.

15277-68
RIBOFLAVIN-MEDIATED PHOTODECOMPSITION OF AMITROLE IN RELATION TO CHLOROSIS.
P Castelfranco A Oppenheim S Yamaguchi
Weeds 11(2):111-115
Apr 1963 79.8 W41
Amitrole, Riboflavin.

15278-68
SHIFT TO CHEMICAL WEED CONTROL HASTENS CHANGE FROM MULES TO TRACTORS.
Dumas
Agr Chem 20(3):30-34,111-112
Mar 1965 381 AG8
Chemical control (weeds), Mules, Tractors.

15279-68
EFFECT OF INCORPRATION AND METHOD OF IRRIGATION ON PREEMERGENCE HERBICIDE.
L S Jordan R E Day W A Clerx
Weeds 11(2):157-160
Apr 1963 79.8 W41
Herbicides, Irrigation.

1528D-68
INHIBITION OF PHOTOCHEMICAL ACTIVITY OF ISOLATED CHLOROPLASTS BY ACYLANILIDES.
D E Moreland K L Hill
Weeds 11(1):55-60, BIBL. 59-6D, TABS.
Jan 1963 79.8 W41
Chemical control (weeds), Chloroplasts, Herbicides, Photochemistry.

15281-68
AN OBSTACLE COURSE IN RAGWEED CONTROL.
R Shiffman
Agr Chem 20(2):28,100-101
Feb 1965 381 AG8
Ambrosia, Pesticides, Weed control.

15282-68
HERBICIDAL CONTROL OF TALL LARKSPUR.
P J Torell R R Baas
Weeds 11(1):10-13, TABS., PLS.
Jan 196D 79.8 W41
Chemical control (weeds), Herbicides, Plant growth inhibitors.

152R3-68
APPRAISAL OF BIOLOGICAL CONTROL OF ARCEUTHOBIUM CAMPYLOPODUM F. CAMPYLOPODUM BY COLLETOTRICHUM GLOEOSPORIOIDES.
E F Wicker
Plant Dis Rep 51(4):311-313 REF
Apr 1967 1.9 P69P
Arceuthobium, Biological control (weeds), Fungus diseases (plants), Parasitic plants, Pinus ponderosa, Tree diseases.
A damage appraisal of Colletotrichum blight of Arceuthobium campylopodum f. campylopodum on ponderosa pine growing near Spangle, Washington revealed that 35 to 67 percent of the dwarf mistletoe plants sampled were injured and 23.6 percent of the dwarf mistletoe shoots sampled were killed by the disease.

Other Pests

15284-68
THE RELATIVE RESISTANCE TO INSECT ATTACK OF THREE CABBAGE VARIETIES AT DIFFERENT STAGES OF PLANT MATURITY.
R K Chapman
Entomol Soc Amer Ann 58(6):897-902, 1 REF., 5 FIGS.
Nov 1965 420 EN82
Cabbage, Plant pest resistance, Plant physiology.

15285-68
SEASONAL SHIFTS IN THE RELATIVE RESISTANCE TO INSECT ATTACK OF EIGHT COMMERCIAL CABBAGE VARIETIES.
R K Chapman
Entomol Soc Amer Ann 58(6):892-897 5 REF., 6 FIGS.
Nov 1965 420 EN82
Cabbage, Climate, Pieris, Plant pest resistance, Trichoplusia, Weather.

15286-68
U.SDA'S LONG RANGE OBJECTIVES IN MEETING AGRICULTURAL PEST PROBLEMS.
E F Knipling
Agr Chem 18(11)'53-54,120
Nov 1963 3B1 AG8
Attractants, Biological control (pests), Pest control, Pesticides.

30 LIVESTOCK PROTECTION

15287-68
STUDIES ON AN IMMUNOGENIC AGENT AGAINST BRUCELLA ABORTUS. II. PRELIMARY STUDIES OF AN IMMUNOLOGICALLY ACTIVE SOLUBLE AGGLUTINOGEN.
R C Allen
Amer J Vet Res 22(88):558-563
May 1961 41.8 AM3A
Brucella abortus antigens, Immunization.

15288-68
VARIATIONS IN UTERINE RESPONSE TO EXPERIMENTAL INFECTION DUE TO THE HORMONAL STATE OF THE OVARIES. II. THE MOBILIZATION OF LEUKOCYTES AND THEIR IMPORTANCE IN UTERINE BACTERICIDAL ACTIVITY.
A W Broome A J Winter S H McNutt L E Casida
Amer J Vet Res 21(83):675-681, TABS.
Jul 1960 41.8 AM3A
Hormones, Leukocytes, Ovaries, Uterus.

15289-68
USE OF EMULSIFIED FAT FOR INTRAPERITONEAL ALIMENTATION.
M J Burns C H Clark
Amer J Vet Res 22(86):147-149
Jan 1961 41.8 AM3A
Human nutrition.

15290-68
FECAL ELIMINATION OF ESTROGENS BY CATTLE TREATED WITH DIETHYLSTILBESTROL AND HEXESTROL.
M R Callantine M Stob F N Andrews
Amer J Vet Res 22(88):462-465
May 1961 41.8 AM3A
Cattle, Diethylstilbestrol, Excreta, Feces, Hexestrol.

15291-68
TRANQUILLISING HORSES WITH PROMAZINE HYDROCHLORIDE.
J S M Cosgrove S M Collins J F Kavenagh J S Cosgrove
Brit Vet J 116(1):31-33
Jan 1960 41.8 V643
Horses, Phenothiazine, Promazine hydrochloride.

15292-68
A SEMI-QUANTITATIVE DETERMINATION OF AFLATOXIN B IN GROUNDNUT MEAL, GROUNDNUTS AND PEANUT BUTTER.
H De Iongh
Vet Rec 76(34)'901-903, 5 REFS., 2 TABS.
22 Aug 1964 41.8 V641
Aflatoxin, Chromatography, Peanut butter, Peanut meal, Peanuts.

15293-68
POTENCY TESTING OF LOW EGG PASSAGE MODIFIED LIVE-VIRUS RABIES VACCINES.
D J Dean I Sherman
22(89):644-649, TABS.
Jul 1961
Rabies virus, Vaccines, Viruses.

15294-68
THE POSITION OF THE CANINE PROSTRATE GLAND.
N Gordon
Amer J Vet Res 22(86):142-146, BIBL. 146
Jan 1961 41.8 AM3A
Dogs, Glands (animals).

15295-68
THE AGES AT WHICH THE CENTERS OF OSSIFICATION APPEAR ROENTGENOGRAPHICALLY IN THE LIMB BONES OF THE DOG.
W C D Hare
Amer J Vet Res 22(90):825-835, BIBL. 835
Sep 1961 41.8 AM3A
Bones, Dogs, Extremities.

15296-68
VARIATION IN THE INFLAMMATORY RESPONSE AND BACTERICIDAL ACTIVITY OF THE SHEEP UTERUS DURING THE ESTROUS CYCLE.
H W Hawk G D Turner J F Sykes
Amer J Vet Res 22(89):689-692
Jul 1961 41.8 AM3A

30 15297-68

Bactericides, Leukocytes.

15297-68
THE MEASUREMENT OF BOVINE THYROID ACTIVITY USING LOW DOSAGES OF RADIOACTIVE IODINE I131.
J R Howes W A Higinbotham J F Gennaro J P Feaster
Amer J Vet Res 22(90):887-892, BIBL. 891-892
Sep 1961 41.8 AM3A
Cattle, Radioelements, Thyroid gland.

15298-68
INOCULATION OF MICROBES INTO THE INTESTINAL TRACTS OF SMALL ANIMALS.
R E Johnson D A Peterson
Amer J Vet Res 22(87):330-332
Mar 1961 41.8 AM3A
Animals, Immunization, Microorganisms.

15299-68
ERYTHROCYTE SURVIVAL STUDIES IN DOMESTIC AND BIGHORN SHEEP, USING GLYCINE-2-C14.
J J Kaneko C E Cornelius W P Heuschele
Amer J Vet Res 22(89):683-685
Jul 1961 41.8 AM3A
Bighorn sheep, Erythrocytes.

15300-68
THE EFFECTS OF EXOGENOUS TESTOSTERONE ON SPERMATOGENESIS OF BULLS.
C F Koinecke L E McDonald
Amer J Vet Res 22(87):209-216, BIBL. 214-215
Mar 1961 41.8 AM3A
Bulls, Spermatogenesis.

15301-68
ANTIBIOTIC MEDIUMS FOR THE ISOLATION OF VIBRIOS FROM BULL SEMEN.
W N Plastridge M E Koths L F Williams
Amer J Vet Res 22(90):867-874
Sep 1961 41.8 AM3A
Antibiotics, Culture media, Semen.

15302-68
EFFECT OF CORTISONE ON LEPTOSPIRA POMONA INFECTION IN THE GUINEA PIG.
B L Schricker L E Hanson
Amer J Vet Res 22(88):580-586, BIBL. 585, TABS.
May 1961 41.8 AM3A
Cortisone, Guinea pigs.

15303-68
STUDIES ON THE ERYTHROCYTE SEDIMENTATION RATE IN DOMESTIC ANIMALS. VII. ROULEAU FORMATION.
K Sesaki
Amer J Vet Res 22(87):319-323, BIBL. 322-323
Mar 1961 41.8 AM3A
Erythrocyte sedimentation reaction, Livestock.

15304-68
EFFECT OF DIET ON AORTIC RUPTURES IN TURKEYS INDUCED BY DIETHYLSTILBESTROL.
C F Simpson R H Harms
Poultry Sci 43(3):681-700
May 1964 47.8 AM33P
Aneurysms, Aorta, Diethylstilbestrol, Sex, Turkeys.

15305-68
EFFECT OF NATURALLY OCCURRING HIGHLY MINERALIZED WATER ON THE GROWTH OF LABORATORY ANIMALS.
B H Skold R Jensen
Amer J Vet Res 22(88):601-605, BIBL. 604, TABS.
May 1961 41.8 AM3A
Animal physiology, Laboratory animals, Water pollution.

15306-68
POST-TETANIC POTENTIATION IN SPINAL CORD OF NORMAL AND MYOCLONIC PIGS.
M W Stromberg R L Kitchell R C Callstrom
Amer J Vet Res 22(86):72-79
Jan 1961 41.8 AM3A
Spinal cord, Spine, Swine, Tetanus.

15307-68
THE ANTIGENIC STRUCTURE OF VIRULENT AND AVIRULENT STRAINS OF ERYSIPELOTHRIX RHUSIOPATHIAE. II. IMMUNOCHEMIC AND SEROLOGIC INVESTIGATIONS.
M Truszczynski
22(90):839-845, TABS.
Sep 1961
Immunochemistry.

15308-68
A RAPID, PERMANENT WRIGHT'S STAINING METHOD FOR CHROMOSOMES AND CELL NUCLEI.
H S Tubiash
Amer J Vet Res 22(89):807-810
Jul 1961 41.8 AM3A
Animal genetics, Cell nucleus, Chromosomes.

15309-68
DETECTION OF LEPTOSPIRES IN NATURALLY INFECTED DOGS, USING FLUORESCEIN-LABELED ANTIBODIES.
F H White R E Stoliker M M Galton
Amer J Vet Res 22(88):650-654
Jul 1961 41.8 AM3A
Antibodies, Dogs, Leptospirosis.

15310-68
CHARACTERIZATION OF VIBRIO FETUS ANTIGENS. IV. STUDY OF POLYSACCHARIDE-ANTIBODY REACTIONS BY A RAPID SLIDE GEL DIFFUSION TECHNIQUE.
M Ristic D K Hurty
Amer J Vet Res 22(89):775-789, TABS
Jul 1961 41.8 AM3A
Antibodies, Antigens, Polysaccharides.

15311-68
LEUKOSIS - TRANSMISSION BY BEETLES.
S C Schmittle C S Eidson J R Lal B B Goode
Amer Vet Med Ass J 147(12):1673-1674
15 Dec 1965 41.8 AM3
Alphitobius, Chickens, Coleoptera, Insect vectors, Leukosis.

Diseases

15312-68
REPORT ON THE PULLORUM DISEASE TESTING RESULTS FOR THE 32ND NORTHEASTERN CONFERENCE ON AVIAN DISEASES.
Avian Dis 4(4):547-548
Nov 1960 41.8 AV5
Animal diseases, Birds, Epizootic diseases, Poultry, Pullorum disease.

15313-68
THE ISOLATION OF INFECTIOUS BOVINE RHINOTRACHEITIS VIRUS FROM CATTLE AFFECTED WITH CONJUNCTIVITIS-OBSERVATIONS ON THE EXPERIMENTAL INFECTION.
F R Abinanti G J Plumber
Amer J Vet Res 22(86):13-17
Jan 1961 41.8 AM3A
Bovine rhinotracheitis virus, Cattle, Conjunctivitis, Livestock diseases, Respiratory diseases, Virus diseases (animals).

15314-68
CULTIVATION OF MYCOPLASMA OF AVIAN ORIGIN.
H E Adler J Berg
Avian Dis 4(1):3-12, BIBL. 11-12
Feb 1960 41.8 AV5
Birds, Culture media, Mycoplasmosis.

15315-68
A HEAT-INACTIVATION TEST FOR DIFFERENTIATING SPECIFIC AND NONSPECIFIC AGGLUTINATION REACTIONS FOR BOVINE BRUCELLOSIS.
T E Amerault C A Manthei E R Goode Jr G Lambert
Amer J Vet Res 22(88):564-569, TABS.
May 1961 41.8 AM3A
Brucellosis, Cattle.

15316-68
SALMONELLA AND SHIGELLA INFECTIONS IN RATS IN SELECTED AREAS OF COLOMBIA.
A A Arata J B Vaughn K W Newell R A J Barth M Gracian

Amer J Trop Med Hyg 17(1):92-95,MAP
Jan 1968 448.8 AM326
Rats, Salmonella, Zoonoses.

15317-68
OBSERVATIONS ON THE COLONIAL MORPHOLOGY OF LEPTOSPIRES.
J C Armstrong H S Goldberg
Amer J Vet Res 21(81):311-315
Mar 1960 41.8 AM3A
Leptospirosis, Plant morphology.

15318-68
A SLIDE SMEAR TECHNIQOE FOR THE DIAGNOSIS OF LARYNGOTRACHEITIS.
W B Armstrong
Avian Dis 3(1):80-84
Feb 1959 41.8 AV5
Diagnosis, Histology.

15319-68
ERYTHROCYTE SURVIVAL IN EXPERIMENTAL ANAPLASMOSIS.
N F Baker J W Osehold J F Christensen
Amer J Vet Res 22(88):590-596
May 1961 41.8 AM3A
Anaplasmosis, Erythrocytes.

15320-68
ISOLATION OF AN ONIDENTIFIED MYXOVIROS FROM CRICKENS WITH A RESPIRATORY DISEASE.
R A Bankowski R Corstvet W Philippo
Avian Dis 4(3):304-305
May 1960 41.8 AV5
Chickens, Myxoviruses, Respiratory diseases.

15321-68
TREATMENT OF CHRONIC RESPIRATORY DISEASE WITH TYLOSIN.
L E Barnes F O Gossett
Avian Dis 4(3):307
May 1960 41.8 AV5
Chronic respiratory disease, Drug therapy.

15322-68
TREATMENT OF EXPERIMENTAL INFECTIOOS SINOSITIS OF TURKEYS WITB ERYTHROMYCIN.
L E Darnes E E Ose F O Gossett
Avian Dis 4(2):176-187, BIBL. 186-187, TABS.
May 1960 41.8 AV5
Drug therapy, Erythromycin, Turkeys.

15323-68
ISOLATION AND PROPERTIES OF BOVINE HERPESVIROS FROM A CALF WITH RESPIRATORY DISEASE AND KERATOCONJOCTIVITIS. (GE)
A Bartha M Juhasz B Liebermann H Bantschel P Schulze
Arch Exp Veterinarmed 21(2): 615-623 REF
May 1967 41.8 EX7
Cattle, Herpesviruses, Respiratory diseases.
Abstract

15324-68
THE HISTOPATHOLOGIC CHARACTERISTICS OF DISEASES PRODUCINE INFLAMATION OF THE AIR SACS IN TURKEYS-A COMPARATIVE STUDY.
J N Beasley R W Moore J R Watkins
Amer J Vet Res 32(83):85-92, BIBL. 91, TABS.
Jan 1961 41.8 AM3A
Air sacs, Chronic respiratory disease, Ornithosis, Pleuropneumonia-like organisms, Turkeys.

15325-68
THE ISOLATION AND PROPAGATION OF A NATURALLY OCCORRING TURKEY LYMPHOID TUMOR BY CELLULAR TRANSPLANTS.
R C Belding V L Sanger
Amer J Vet Res 2B(87):271-273
Mar 1961 41.8 AM3A
Turkeys.

15326-68
PHYSICOCHEMICAL PROPERTIES OF THE INFECTIOOS BORSAL AGENT (IBA).
W J Benton M S Cover J K Rosenberger R S Lake
Avian Dis 11(3):438-445 REF
Aug 1967 41.8 AV5
Antiseptics, Gumboro disease, Poultry, Properties.
Abstract:
the agent was inhibited by formalin and Wecodyne, hnt not hy phenol, merthiolate, Staphene, or Hyamine 2389. ether and chloroform treatment had no deleterious effect on the agent.

15327-68
STUDIES ON ENTEROVIRUSES OF THE PIG-V. THE EXPERIMENTAL DISEASE INDUCED IN PATHOGEN-FREE, COLOSTRUM-DEPRIVED PIGS BY THE T8O AND T52A STRAINS OF A SWINE POLIO-ENCEPHALOMYELITIS VIROS.
A O Betts A R Jennings
Res Vet Sci 1(2):160-171, TABS.
Apr 1960 41.8 R312
Colostrum, Enteroviruses.

15328-68
STODIES ON ENTEROVIRUSES OF THE PIG-II.
A O Betts
Res Vet Sci 1(1):65-71
Jan 1960 41.8 R312
Baby pigs.

15329-68
A PRELIMINARY NOTE ON THE USE OF AN INACTIVATED VACCINE AGAINST EQUINE PEST. (FR.)
P Bourdin J Monnier-Camhon
Acad Vet France Bull 40(4):187-191
Apr 1967 41.9 R24
African horse sickness, Horses, Immunization, Vaccines.

15330-6R
SULFOR-SELENIUM-VITAMIN E INTERRELATIONS IN OVINE NUTRITION.
P A Boyazoglu R M Jordan R J Meade
J Anim Sci 26(6):1390-1396 REF
Nov 1967 49 J82
Selenium, Sheep, Sulfur, Vitamin e.
Abstract

15331-68
NON-SPECIFIC PLATE AGGLOTINATION REACTIONS WITH PPLO ANTIGEN.
C I Boyer Jr J Fahricant J A Brown
Avian Dis 4(4):546-547
Nov 1960 41.8 AV5
Agglutination test, Antigens.

15332-68
AVIAN ENTERIC CYTOPATHOGENIC VIRUSES. I. ISOLATION.
C N Burke R E Luginbnhl E L Jungherr
Avian Dis 3(4):412-41R
Nov 1959 41.8 AV5
Viruses.

15333-68
AVIAN ENTERIC CYTOPATROGENIC VIROSES. II. CBARACTERISTICS OF A PROTOTYPE.
C N Burke R E Luginbuhl E L Jungherr
Avian Dis 3(4):419-427
Nov 1959 41.8 AV5
Virnses.

15334-68
STUDIES ON AVIAN ENCEPHALOMYELITIS. I TBE USE OF A SERUM -NEOTRALIZATION TEST IN THE DETECTION OF IMMUNITY LEVELS.
B W Calnek H Jehnich
3(2):95-104, TABS.
May 1959
Immunity, Serum neutralization test.

15335-68
STUDIES ON AVIAN ENCEPRALOMYELITIS. II IMMUNE RESPONSES TO VACCINATION PROCEDURES.
R W Calnek B Jehnich
Avian Dis 3(3):225-239, BIBL. 238-239, TABS.
Aug 1959 41.R AV5
Avian encephalomyelitis, Immnnity.

15336-68
STUDIES ON AVIAN ENCEPHALOMYELITIS. III IMMUNE RESPONSE TO RETA-PROPIOLACTONE INACTIVATED VIRUS.
R W Calnek P J Taylor
Avian Dis 4(2):116-122, BIBL. 121-122, TABS.
May 1960 41.R AV5
Avian encephalomyelitis, Hydracrylic acid heta-lactone, Immunity.

15337-68
THE DETECTION OF ANTIBODY AGAINST LEPTOSPIRA POMONA IN COMPOSITE HERD MILK SAMPLES.
E A Carhrey R A Packer
Amer J Vet Res 22(88):573-579, TABS.
May 1961 41.8 AM3A
Antibodies, Milk analysis.

30 15338-68

15338-66
SEROLOGICAL INVESTIGATION IN FRENCH CATTLE; RESEARCH ON HEMAGGLUTINATION INHIBITING ANTIBODIES DUE TO MYXOVIRUS PARAINFLUENZA-3. (PR)
J Cherby H G Petermann G Beranger J P Soulebot
Rec Med Vet 143(8):755-765, MAP, REF.
Aug 1967 41.8 R24
Antibodies, Cattle, Hemagglutination, Parainfluenza-3 virus, Serological tests.
Abstract

15339-66
TISSUE CULTURE PROPAGATION AND PATHOLOGY OF A CELO VIRUS.
T W Chomiak R E Luginbuhl C F Helmboldt
Avian Dis 4(4):544-545
Nov 1960 41.8 AV5
Chicken embryo lethal orphan virus, Tissue culture, Virus diseases (animals).

15340-68
REPORT OF THE COMMITTE ON NOMENCLATURE AND REPORTING OF DISEASE, NORTHEASTERN CONFERENCE ON AVIAN DISEASE, JUNE, 1962.
H L Chute M S Cover G H Snoeyhos C I Angstrom
Avian Dis 6(4):516-521, TABS.
Nov 1962 41.8 AV5
Chickens, Livestock diseases, Pullorum disease.

15341-68
A QUANTITATINE MEASUREMENT OF THE BLOOD LOSS CAUSED BY ANCYLOSTOMIASIS IN DOGS.
C H Clark J M Kling C H Woodley N Sharp
Amer J Vet Res 22(88):370-373
May 1961 41.8 AM3A
Ancylostomiasis, Dogs.

15342-68
ATYPICAL PASTEURELLA INFECTIONS IN CHICKENS.
D S Clark J P Godfrey
Avian Dis 4(3):280-290, TABS.
May 1960 41.8 AV5
Chickens, Fowl cholera.

15343-68
NATURAL OCCURRENCE OF LEPTOSPIROSIS IN THE MEADOW VOLE, MICROTUS PENNSYLVANICUS.
L G Clark J I Kresse R R Marshak C J Hollister
Amer J Vet Res 22(90):949-950
Sep 1961 41.8 AM3A
Field mice, Leptospirosis.

15344-68
STAINING FIXED PREPARATIONS OF CHICKEN BLOOD CELLS WITH COMBINATION MAY-GREENWALD-WRIGHT-PHLOXINE B STAIN.
P W Cook
Avian Dis 3(3):272-290
Aug 1959 41.8 AV5
Animal histology, Blood cells, Chickens.

15345-68
CALCIUM GOUT (KALKGICHT) AND CALCINOSIS CIRCUMSCRIPTA IN DOGS.
E Cotchin
Brit Vet J 116(1):3-8, BIBL., PL
Jan 1960 41.8 V643
Calcinosis, Dogs, Gout.

15346-68
THE EFFECT OF PARENTAL IMMUNITY AND AGE ON THE RESPONSE TO INFECTICUS LARYNGOTRACHEITIS VACCINATION.
M S Cover W J Renton W C Krauss
Avian Dis 4(4):467-473, TABS.
Nov 1960 41.8 AV5
Immunity, Immunization, Infectious laryngotracheitis.

15347-68
PULMONARY ADENOMATOSIS OF SHEEP-METASTASIZING BRONCHIOLAR TUMORS.
A Cuba-Caparo E de la Vega M Copaira
Amer J Vet Res 22(89):673-682, BIBL. 681-682
Jnl 1961 41.8 AM3A
Neoplasms, Pulmonary adenomatosis, Sheep.

15348-68
FLUORESCEIN-LABELED ANTIBODY TECHNIQUE FOR IDENTIFICATION OF LEPTOSPIRAL SEROTYPES.
W G Dacres
Amer J Vet Res 22(88):570-572
May 1961 41.8 AM3A
Antibodies.

15349-68
NEWCASTLE DISEASE IMMUNITY IN BROILERS AND CAPONETTES VACCINATED WITH KILLED-VIRUS AND LIVE-VIRUS VACCINES.
A H Dardiri V J Yates P W Chang D E Fry
Amer J Vet Res 22(86):93-98, TABS.
Jan 1961 41.8 AM3A
Immunization, Livestock diseases, Newcastle disease, Poultry, Viral vaccines.

15350-68
VIRAL ENCEPHALOMYELITIS OF EQUINES AND DOMESTIC RUMINANTS IN THE NEAR EAST. I.
R Daubney E A Mahlau
Res Vet Sci 8(3): 375-397 REF
Jul 1967 41.8 R312
Equine encephalomyelitis, Horses, Ruminants.
Abstract

15351-68
STUDIES ON HEMOLYTIC ESCRERICHIA COLI ASSOCIATED WITH EDEMA DISEASE OF SWINE. I. SEPARATION AND PROPERTIES OF A TOXIN OF HEMOLYTIC ESCHERICHIA COLI.
J W Davis R C Allen R M Smibert
Amer J Vet Res 22(89):636-640
Jnl 1961 41.8 AM3A
Edema disease, Swine, Toxins.

15352-68
FOOT-AND-MOUTH DISEASE VIRUS- ITS BEHAVIOR IN CATTLE AFTER SERIAL PASSAGES IN CHICKEN EMBRYOS AND CHICKS.
P D DeLay H Rozemeyer
Amer J Vet Res 22(88):533-536
May 1961 41.8 AM3A
Cattle, Chicks, Foot-and-mouth disease virus.

15353-68
ANTIBIOTIC RESISTANCE AND MUTATION RATES OF MYCOPLASMA.
C H Domermuth
Avian Dis 4(4):456-466, TABS.
Nov 1960 41.8 AV5
Antibiotics, Mutation, Pleuropneumonia-like organisms.

15354-68
SOME OBSERVATIONS ON FIELD CASES OF FACIAL ECZEMA: LIVER PATROLOGY AND DETERMINATION OF SERUM BILIRUBIN, CROLESTEROL, TRANSAMINASE AND ALKALINE PROSPHATASE.
J Done P R Mortimer A Taylor
Res Vet Sci 1(1):76-83
Jan 1960 41.8 R312
Aminotransferases, Bilirubin, Cholesterol, Facial eczema.

15355-68
EXPERIMENTAL VISCERAL LARVA MIGRANS IN THE PIG.
J T Done M D Richardson T E Gibson
Res Vet Sci 1(2):133-151, TABS, BIBL.150-151
Apr 1960 41.8 R312
Baby pigs, Larvae.

15356-68
EASTERN ENCEPHALITIS IN WHITE PEKIN DUCKLINGS ON LONG ISLAND.
E Dougherty 3rd J I Price
Avian Dis 4(3):247-258, BIBL. 255-258, PLS.
May 1960 41.8 AV5
Avian encephalomyelitis, Ducklings, Eastern equine encephalomyelitis, Pekin ducks.

15357-68
ENZOOTIC NASAL ADENOCARCINOMA IN SHEEP.
J R Duncan D E Tyler M J Van Der Maaten J R Andersen
Amer Vet Med Ass J 151(6), 732-734.
15 Sep 1967 41.8 AM3
Adenocarcinoma, Livestock diseases, Sheep.
Abstract

15358-68
THE DETECTION OF ACUTE AVIAN LEUKOSIS AS A CONTAGIOUS DISEASE.
W R Dunlop S D Kottaridis S C Smith R G Stront
Poultry Sci 44(6):1537-1540
Nov 1965 47.8 AM33P
Avian leukosis complex, Chicks, Diagnosis.

15359-68
THE RECOVERY OF BACTERIUM ANITRATUM (RSW. FROM ANIMALS.
E M Ellis
Amer J Vet Res 22(88):610-613
May 1961 41.8 AM3A
Animals.

15360-68
THE PROBLEM OF SALMONELLA ORGANISMS IN ANIMAL BY-PRODUCTS AND FEEDS.
E M Ellis E E Wedman
Amer Vet Med Ass J 142(3)'291-292
01 Feb 1963 41.8 AM3
Animal nutrition, Feed, Salmonella, Salmonellosis.

15361-68
ELECTRON MICROSCOPY OF THE BOVINE HEART IN CONGESTIVE FAILURE OF HIGH MOUNTAIN DISEASE.
G P Epling
Amer J Vet Res 29(1):97-109 REF
Jan 1968 41.8 AM3A
Brisket disease, Cattle, Electron microscopy, Heart.
Abstract

15362-68
SEROLOGICAL STUDIES OF AVIAN PLEUROPNEUMONIA-LIKE ORGANISMS (PPLO) WITH EDWARD'S TECHNIQUE.
J Fabricant
Avian Dis 4(4):505-514, BIBL. 513-514, TABS.
Nov 1960 41.8 AV5
Pleuropneumonia-like organisms, Serological tests.

15363-68
STUDIES OF EGG TRANSMISSION OF PPLO IN CHICKENS.
J Fabricant P P Levine R W Calnek H E Adler J R Berg
Avian Dis 3(2):197-222, TABS.
May 1959 41.8 AV5
Pleuropneumonia-like organisms.

15364-68
SWINE SERUM AND CO2 IN THE ISOLATION OF AVIAN PPLO.
J Fabricant
Avian Dis 3(4):428-439, TABS.
Nov 1959 41.8 AV5
Carbon dioxide, Pleuropneumonia-like organisms, Serum, Swine.

15365-68
EXPERIMENTAL PRODUCTION OF COMPLICATED CHRONIC RESPIRATORY DISEASE INFECTION ('AIR SAC' DISEASE).
J Fabricant P P Levine
Avian Dis 6(1):13-23, TABS.
Feb 1962 41.8 AV5
Animal respiration.

15366-68
RESULTS OF CONTINUOUS LOW-LEVEL INOCULATIONS WITH EIMERIA BOVIS IN CALVES.
P R Fitzgerald
Amer J Vet Res 28(124)0659-665 REF
May 1967 41.8 AM3A
Animal disease resistance, Cattle, Coccidiosis.

15367-68
CASE REPORT- AN OUTBREAK OF ORNITHOSIS IN NEW MEXICO.
D W Francis
Avian Dis 4(3):310-311
May 1960 41.8 AV5
Epizootic diseases, Ornithosis.

15368-68
ISOLATION OF AN ANAEROBIC VIBRIO FROM A KING PENGUIN (APTENODYTES LONGIROSTRIS).
G Fraser
Avian Dis 5(3)'243-250, BIBL. 249-250
Aug 1961 41.8 AV5
Anaerobic bacteria, Aptenodytes, King penguins.

15369-68
HIGH MORTALITY IN FLORIDA SWINE HERD INFECTED WITH THE ENCEPHALOMYOCARDITIS VIRUS. AN ACCOMPANYING EPIZOOTIOLOGIC SURVEY.
J R Gainer J R Sandefur W J Bigler
Cornell Vet 58(1):31-47 REF
Jan 1968 41.8 C81
Antibodies, Garbage (feed), Swine.
Abstract

15370-68
THE EMERGENCE OF RESISTANT STRAINS OF SALMONELLA TYPHIMURIUM IN THE TISSUES AND ALIMENTARY TRACTS OF CHICKENS FOLLOWING THE FEEDING OF AN ANTIBIOTIC.
J S Garside R F Gordon J F Tucker
Res Vet Sci 1(2):184-199
Apr 1960 41.8 R312
Antibiotics, Chickens, Salmonella bacterins.

15371-68
NEWCASTLE DISEASE: PRELIMINARY FIELD TESTS OF BETA-PROPIOLACTONE-KILLED VACCINE.
E Gill H D Stone
Avian Dis 4(4):543-544
Nov 1960 41.8 AV5
Hydracrylic acid beta-lactone, Newcastle disease vaccines.

15372-68
GAMMA GLOBULIN LEVELS AND NEONATAL MORTALITY IN MARKET CALVES.
P J Glantz
Vet Rec 77(17)'490
41.8 V641
Calves, Gamma globulins.

15373-68
ESCHERICHIA COLI SEROTYPES ISOLATED FROM SALPINGITIS AND CHRONIC RESPIRATORY DISEASE OF POULTRY.
P J Glantz S Narotsky G Barbash
Avian Dis 6(3):322-328
Aug 1963 41.8 AV5
Poultry, Salpingitis.

15374-68
PLAQUE CHARACTERISTICS OF FOUR CLASSES OF BOVINE VIRUSES.
J R Gratzek R F Rosenbusch G M Buening
Amer J Vet Res 28(124)0641-646 REF
May 1967 41.8 AM3A
Cattle, Plaque.

15375-68
BOVINE PAPULAR STOMATITIS. II. THE EXPERIMENTALLY PRODUCED DISEASE.
R A Griesemer C R Cole
Amer J Vet Res 22(88):473-481
May 1961 41.8 AM3A
Animal diseases, Bovine papular stomatitis virus.

15376-68
EXTEROTOXEMIA OF SHEEP. II. DISTRIBUTION OF I131 RADIOIODINATED SERUM ALBUMIN IN BRAINS OF CLOSTRIDIUM PERFRINGENS TYPE D INTOXICATED LAMBS.
L A Griner W D Carlson
Amer J Vet Res 22(88):443-446
May 1961 41.8 AM3A
Brain, Clostridium perfringens bacterin, Enterotoxemia, Lambs, Serum albumin, Sheep.

15377-68
EXTEROTOXEMIA OF SHEEP. I. EFFECTS OF CLOSTRIDIUM PERFRINGENS TYPE D TOXIN ON THE BRAINS OF SHEEP AND MICE.
L A Griner
Amer J Vet Res 22(88):429-442, TABS.
May 1961 41.8 AM3A
Brain, Clostridium perfringens bacterin, Enterotoxemia, Mice, Sheep, Toxins.

15378-68
ENTEROTOXEMIA OF SHEEP. III. CLOSTRIDIUM PERFRINGENS TYPE D ANTITOXIN TITERS OF NORMAL, NONVACCINATED LAMBS.
L A Griner
Amer J Vet Res 22(88):447-448
May 1961 41.8 AM3A
Clostridium perfringens bacterin, Lambs, Sheep, Toxins.

15379-68
SIZE, SCORE AND SPEED OF DEVELOPMENT OF TUMORS IN CHICKENS IN RESPONSE TO SUBCUTANEOUS INOCULATIONS WITH ROUS SARCOMA VIRUS.
N R Gyles J L Miley C J Brown
Poultry Sci 46(4):789-795
Jul 1967 47.8 AM33P
Chickens, Rous sarcoma virus.

15380-68
TREATMENT OF DIARRHOEA IN DOGS.
J D Hawkins
Vet Rec 74(28)'800
14 Jul 1962 41.8 V641
Attapulgite, Diarrhea, Dogs, Streptomycin.

15381-6R
STUDIES ON PASTEURELLOSIS. IV. KILLED FOWL CHOLERA VACCINE ABSORBED ON ALUMINUM HYDROXIDE.
K L Heddleston R C Reisinger
Avian Dis 4(4):429-435
Nov 1960 41.8 AV5
Aluminum hydroxide, Bacterial vaccines, Fowl cholera, Pasteurellosis.

3D 15382-68

15382-68
STUDIES ON PASTEURELLOSIS. III. CONTROL OF EXPERIMENTAL FOWL CHOLERA IN CHICKENS AND TURKEYS WITH AN EMULSIFIED KILLED VACCINE.
K L Heddleston R C Reisinger
Avian Dis 3(4):397-404
Nov 1959 41.8 AV5
Bacterial vaccines, Chickens, Fowl cholera, Pasteurellosis, Turkeys.

15383-68
CONTROL OF CHRONIC RESPIRATORY DISEASE. II. THE EFFECT OF LOW CALCIUM DIET, TEREPHTHALLIC ACID AND CHLORTETRACYCLINE.
J O Reishman B O Olson D C Shelton
Avian Dis 4(4):413-418
Nov 1960 41.8 AV5
Calcium, Chlortetracycline, Chronic respiratory disease, Diet.

15384-68
DETECTION OF BACTERIAL CONTAMINANTS IN LIVE VIRUS POULTRY VACCINES.
J M Hejl J E Faber
Avian Dis 3(1):41-50, TABS.
Feb 1959 41.8 AV5
Immunology, Poultry.

15385-68
THE DIAGNOSIS OF EQUINE INFECTIOUS ANEMIA USING THE COMPLEMENT-FIXATION TEST, SIDEROCYTE COUNTS, HEPATIC BIOPSIES, AND SERUM PROTEIN ALTERATIONS.
J R Benson T C McGuire K Kobayashi J R Gorham
Amer Vet Med Ass J 151(12):1830-1839 REF
15 Dec 1967 41.8 AM3
Biopsy, Blood proteins, Diagnosis.
Abstract

15386-68
OXYURIASIS IN LABORATORY MOUSE COLONIES.
W G Roag
Amer J Vet Res 22(86):150-153, TABS.
Jan 1961 41.8 AM3A
Laboratory animals, Mice, Oxyuriasis.

15387-68
STUDIES ON SHIPPING FEVER OF CATTLE. II. PREVALENCE OF PASTEURELLA SPECIES IN NASAL SECRETIONS FROM NORMAL CALVES AND CALVES WITH SHIPPING FEVER.
A R Hoerlein S P Saxena M E Mansfield
Amer J Vet Res 22(88):470-472
May 1961 41.8 AM3A
Calves, Cattle, Pasteurella bacterins, Shipping fever.

15388-68
THE IN VIVO AND IN VITRO ISOLATION OF AVIAN ENCEPHALOMYELITIS VIRUS (AEV).
J Hwang R E Luginbuhl C F Helmboldt
Avian Dis 4(4):545-546
Nov 1960 41.8 AV5
Culture media, Virology.

15389-68
HATCHERY SPREAD OF PULLORUM DISEASE THROUGH DEBEAKING.
R E Jacobs M N Frazier M E Tourtelotte
Avian Dis 4(2):109-115
May 1960 41.8 AV5
Debeaking, Poultry hatcheries, Pullorum disease.

15390-68
IN VITRO DEGRADATION OF OXALATE AND OF CELLULOSE BY RUMEN INGESTA FROM SHEEP FED HALOGETON GLOMERATUS.
L F James J C Street J E Butcher
J Anim Sci 26(6):1438-1444 REF
Nov 1967 49 J82
Cellulose, Degradation, Oxalates, Poisoning, Sheep.
Abstract:
the in vitro data suggests that acute oxalate poisoning may involve impaired cellulose fermentation and rumen dysfunction.

15391-68
A PASTURE TRIAL USING 2 IMMUNIZING DOSES OF A PARASITIC BRONCHITIS VACCINE.
W F H Jarrett F W Jennings W I M McIntyre W Mulligan
Amer J Vet Res 22(88):492-495
May 1961 41.8 AM3A
Bronchitis vaccines, Immunity, Parasitism, Pastures.

15392-68
PLACENTAL PATHOLOGY OF SHEEP WITH VIBIOSIS.
R Jensen V A Miller J A Molello
22(87):169-185
Mar 1961
Placenta, Sheep, Vibriosis.

15393-68
ALBICANS INFECTION IN CHICKENS. I. EFFECT OF VITAMIN A NUTRITIONAL FACTORS INFLUENCING EXPERIMENTAL CANDIDA DEFICIENCY.
S M S Jeoffery S G Kenzy
Avian Dis 4(2):138-151, BIBL. 15D-151
May 1960 41.8 AV5
Animal nutrition, Avitaminosis, Chickens, Deficiency diseases, Moniliasis.

15394-68
EGG TRANSMISSION OF INFECTIOUS SINUSITIS IN NATURALLY INFECTED TURKEYS.
A C Jerstad C M Hamilton V E Smith
Avian Dis 3(1):28-40, TABS.
Feb 1959 41.8 AV5
Sinusitis, Turkey eggs, Turkeys.

15395-68
AN UNUSUAL ASPECT OF PASTEURELLA PSEUDOTUBERCULOSIS IN TURKEYS.
J G Kilian H Yamamoto W E Babcock
Avian Dis 6(4):403-405
Nov 1962 41.8 AV5
Fowl cholera, Pasteurellosis, Turkeys.

15396-68
EXPERIMENTAL WATER INTOXICATION IN CALVES.
C A Kirkbride B A Frey
Amer Vet Med Ass J 151(6), 742-746. REF.
15 Sep 1967 41.8 AM3
Cattle, Metabolism, Poisoning, Water, Water intoxication.
Abstract

15397-68
PHARMACOLOGY AND TOXICOLOGY OF CARBON TETRACHLORIDE IN THE SHEEP. IV. REDUCTION AND AUGMENTATION OF TOXICITY TO SHEEP.
A C Kondos G L Mcclymont
Anstralian J Agr Res 18 (4), 667-682 REF
Jul 1967 23 A0783
Carbon tetrachloride, Fasciola hepatica, Pharmacology, Selenium, Sheep, Tocopherols, Toxicology.
Includes effect of selenium on liver fluke

15398-68
STUDIES IN ANAPLASMOSIS. IV. DEVELOPMENT OF THE CAUSATIVE AGENT IN DEER ERYTHROCYTES TRANSFUSED INTO CALVES.
J P Kreier M Ristic
Amer J Vet Res 22(89):790-794
Jul 1961 41.8 AM3A
Anaplasmosis, Calves, Deer, Erythrocytes.

15399-68
STUDIES ON THE ENTEROVIRUSES OF THE PIG-IV.
THE ISOLATION IN TISSUE CULTURE OF A POSSIBLE ENTERIC CYTOPATHOGENIC SWINE ORPHAN (ECHO) VIRUS (V13) FROM THE FECES OF A PIG.
P H Lamont A O Betts
Res Vet Sci 1(2):152-159
Apr 1960 41.8 R312
Enterovirnses, Swine.

15400-68
STUDIES ON THE TRICHOSTRONGYLUS AXEI (CORBOLD, 1879).
VII. SOME QUANTITATIVE AND PATHOLOGIC ASPECTS OF NATURAL.
S E Leland J H Druge Z N Wyant G W Elam
Amer J Vet Res 22(86):128-138, BIBL. 138
Jan 1961 41.8 AM3A

15401-68
EFFECT OF INTERFERON ON EARLY ENZYME AND VIRAL DNA SYNTHESIS IN VACCINIA VIRUS INFECTION.
S Levine W E Magee H D Hamilton O V Miller
Virology 32(1)D33-40 REF
May 1967 448.8 V81
Deoxyribonucleic acid, Interferon, Thymidine, Vaccinia virns.
Abstract

15402-68
THE CHEMOTHERAPY OF EXPERIMENTAL BABESIASIS IN MICE AND SPLENECTOMIZED CALVES.
J M S Lucas
Res Vet Sci 1(3):218-225, TABS.

Jul 1960 41.8 R312
Drug therapy.

15403-68
A NEW METROD FOR THE PRIMARY EVALUATION OF ANTI-COCCIDIAL ACTIVITY.
J E Lynch
Amer J Vet Res 22(87):324-326
Mar 1961 41.8 AM3A
Immunization.

15404-68
PIGWEED (AMARANTHUS RETROFLEXUS). AN OXALATE-CONTAINING PLANT.
V L Marshall W B Buck G L Bell
Amer J Vet Res 28(124)08B8-889
May 1967 41.8 AM3A
Edema, Oxalates, Poisoning, Swine.

15405-68
THE ISOLATION OF VIRUSES FROM THE CECAL TONSILS OF CHICKENS AND TURKEYS.
P H Matisheck M Mitrovic B B Rumsey V Hobert
Avian Dis 3(2):182-187
May 1959 41.8 AV5
Chickens, Tonsils, Turkeys.

15406-68
DETECTION OF PRECIPITINS AGAINST BRUCELLA OVIS.
T R Matthews M S Trueblood
Cornell Vet 57(3):410-417
Jul 1967 41.8 C81
Brucella ovis, Precipitin test.
Abstract

15407-68
EXPERIMENTALLY INDUCED BOVINE PSOROPTIC ACARIASIS IN A RABBIT.
W P Meleney
Amer J Vet Res 28(124)0892-894
May 1967 41.8 AM3A
Acariasis, Mites, Rabbits, Scabies.

15408-68
POLYARTHRITIS IN SHEEP. I. DESCRIPTION OF THE DISEASE AND EXPERIMENTAL TRANSMISSION.
B Mendlowski D Segre
Amer J Vet Res 21(80):68-73
Jan 1960 41.8 AM3A
Arthritis, Sheep.

15409-68
POLYARTHRITIS IN SHEEP. II. CHARACTERIZATION OF THE CAUSATIVE VIRUS.
B Mendlowski W B Kraybill D Segre
Amer J Vet Res 21(80):74-80, BIBL. 79-80, TABS.
Jan 1960 41.8 AM3A
Arthritis, Sheep.

15410-68
CASSIA OCCIDENTALIS TOXICOSIS IN CATTLE.
H D Mercer F C Neal J A Bines G T Edds
Amer Vet Med Ass J 151(6), 735-741 REF
15 Sep 1967 41.8 AM3
Cassia occidentalis, Cattle, Poisoning, Poisonous plants.
Abstract

15411-68
SAFETY AND TISSUE RESIDUE EVALUATIONS IN SWINE FED RATIONS CONTAINING CHLORTETRACYCLINE, SULFAMETHAZINE, AND PENICILLIN.
B E Messersmith B Sass H Berger G O Gale
Amer Vet Med Ass J 151(6), 719-724.
15 Sep 1967 41.8 AM3
Chlortetracycline, Penicillin, Residues, Sulfamethazine, Swine, Tissues.
Abstract

15412-68
VIRUS HEPATITIS IN TURKEYS.
J D Mongeau R B Truscott A E Ferguson M C Connell
Avian Dis 3(4):388-396, TABS.
Nov 1959 41.8 AV5
Turkeys, Virus hepatitis.

15413-68
THE DEVELOPMENT OF A CHICKEN EMBRYO LETHAL STRAIN OF AVIAN ENCEPHALOMYELITIS VIRUS.
R W Moore A I Flowers
Avian Dis 3(3):239-244
Aug 1959 41.8 AV5
Avian encephalomyelitis, Mortality, Virology, Virus diseases (animals).

15414-68
CONTRIBUTION TO THE STUDY OF OVINE LISTERIOSIS AND IMMUNOPROPHYLAXIS AGAINST THE DISEASE IN FRANCE. (FR)
P Moraillon N Yalcin
Rec Med Vet 143(8):767-775, MAP
Aug 1967 41.8 R24
France, Immunization, Listeriosis, Sheep, Vaccines.
Abstract

15415-68
STUDIES OF BOVINE ENTEROVIRUSES.
C Moscovici M LaPlaca J Maisel C H Kempe
Amer J Vet Res 22(90):852-863, BIBL. 862-863, TABS.
Sep 1961 41.8 AM3A
Bovine enteroviruses.

15416-68
SYNTHESIS AND CYTOPATHOGENESIS OF AFRICAN SWINE FEVER VIRUS IN PORCINE CELL CULTURES.
J Moulton L Coggins
Amer J Vet Res 29(2):219-232 REF
Feb 1968 41.8 AM3A
African swine fever virus, Culture media, Swine.
Abstract

15417-68
A MODIFIED MICROGEL DIFFUSION METHOD AND ITS APPLICATION IN THE STUDY OF THE VIRUS OF DUCK HEPATITIS.
D K Murty L E Hanson
Amer J Vet Res 22(87):274-278
Mar 1961 41.8 AM3A
Ducks, Virus hepatitis.

15418-68
PERSISTENT DIARRHOEA AND VITAMIN B IN THE HORSE.
V J Nolan
Vet Rec 74(15)'466
14 Apr 1962 41.8 V641
Diarrhea, Horses, Vitamin B complex.

15419-68
RELATIONSHIPS BETWEEN EASTERN AND WESTERN EQUINE ENCEPHALOMYELITIS VIRUSES AS DEMONSTRATED BY THE HEMAGGLUTINATION-INHIBITION ANTIBODY RESPONSE OF EXPERIMENTALLY INFECED CHICKENS.
M Ogata R J Byrne
Amer J Vet Res 22(87):266-270
Mar 1961 41.8 AM3A
Antibodies, Chickens, Eastern equine encephalomyelitis virus, Western equine encephalomyelitis virus.

15420-68
SOME FACTORS AFFECTING ROUS SARCOMA VIRUS ACTIVITY IN THE EMBRYONATED EGG INOCULATED BY THE YOLK - SAC ROUTE.
W Okazaki S G Kenzy
Avian Dis 5(1)'66-87, BIBL. 85-88, TABS.
Feb 1961 41.8 AV5
Eggs, Rous sarcoma virus, Yolk sac.

15421-68
THE EFFECTS OF ANTIBIOTICS ON EXPERIMENTAL CHRONIC RESPIRATORY DISEASE IN CHICKENS.
O M Olesiuk H Van Roekel
Avian Dis 3(4):457-470, TABS.
Nov 1959 41.8 AV5
Antibiotics, Chickens, Chronic respiratory disease.

15422-68
TRANSMISSION OF CHRONIC RESPIRATORY DISEASE IN CHICKENS.
O M Olesink H Van Roekel
Avian Dis 4(4):348-368, TABS.
Nov 1960 41.8 AV5
Chickens, Chronic respiratory disease, Epizootic diseases.

15423-68
NEOPLASMS OF THE CANINE AND FELINE URINARY BLADDER: CLINICAL FINDINGS, DIAGNOSIS, AND TREATMENT.
C A Osborne D G Low V Perman
Amer Vet Med Ass J 152(3):247-259 REF
01 Feb 1968 41.8 AM3
Cats, Dogs, Neoplasms.
Abstract

30 15424-68

15424-68
EXPERIMENTAL TRASMISSION OF AFRICAN HORSE-SICKNESS BY MEANS OF MOSQUITOES.
Y Ozawa G Nakata
Amer Vet Med Ass J 147(6)'625
15 Sep 1965 41.8 AM3
African horse sickness, Anopheles, Culex, Culicidae, Insect vectors.

15425-68
FACTORS AFFECTING THE PRODUCTION AND DETECTION OF ORNTHOSIS ANTIBODIES IN INFECTED TURKEYS.
L A Page R A Rankowski
Amer J Vet Res 21(85):971-978, BIBL. 977-978, TABS.
Nov 1960 41.8 AM3A
Antibodies, Immunocbemistry, Ornitbosis, Turkeys.

15426-68
VIRUS DISEASES IN CALVES.
A R Paterson
Vet Rec 74(49)'1384-1389, 71 REFS.
08 Dec 1962 41.8 V641
Calves, Viral vaccines, Virus diseases (animals).

15427-68
SPONTANEOUS ABNORMAL CARDIAC ARRHYTHMIAS AND CONDUCTION DISTURBANCES IN THE DOG. A CLINICAL AND PATHOLOGIC STUDY OF 3,000 DCGS.
D F Patterson D K Detweiler K Rubben R P Botts
Amer J Vet Res 22(88):355-369, BIBL. 368-369, TABS.
May 1961 41.8 AM3A
Animal abnormalities, Dogs.

15428-68
PRODUCTION OF FOOT-AND-MOUTH DISEASE VIRUS WITH HIGH COMPLEMENT-FIXING ANTIGENICITY.
R E Patty N L Norcross
Amer J Vet Res 22(89):775-778
Jul 1961 41.8 AM3A
Antigens, Complement fixation, Foot-and-moutb disease virus.

15429-68
FURTHER STUDIES ON THE CAUSATIVE ORGANISM OF ULCERATIVE ENTERITIS.
M C Peckbam
Avian Dis 4(4):449-456, PLS.
Nov 1960 41.8 AV5
Bacteriology, Ulcerative enteritis.

15430-68
AN EPIZOOTIC OF HISTIOCYTIC SARCOMAS IN CHICKENS INDUCED BY A CELL-FREE AGENT.
M Perek
Avian Dis 4(1):85-94, PLS.
Feb 1960 41.8 AV5
Cbickens, Epizootic diseases, Oncogenic viruses, Sarcoma.

15431-68
CHEMICAL AND ELECTROPHORETIC STUDIES OF THE SERUMS OF CATTLE INFECTED NATURALLY WITH ASIA-1 TYPE FOOT-AND-MOUTH DISEASE VIRUS.
K Perk K Lobl
Amer J Vet Res 22(87):217-223, TABS.
Mar 1961 41.8 AM3A
Cattle, Electrophoresis, Foot-and-moutb disease virus.

15432-68
NOCARDIA ASTEROIDES AS A MAMMARY PATROGEN OF CATTLE. II. THE SOURCES OF NOCARDIAL INFECTION AND EXPERIMENTAL REPRODUCTION OF THE DISEASE.
A C Pier E H Willers M J Mejia
Amer J Vet Res 22(89):698-703, TABS.
Jul 1961 41.8 AM3A
Cattle, Microorganisms.

15433-68
NOCARDIA ASTEROIDES AS A MAMMARY PATROGEN OF CATTLE. I. THE DISEASE IN CATTLE AND THE COMPARATIVE VIRULENCE OF 5 ISOLATES.
A C Pier M J Mejia E H Willers
Amer J Vet Res 22(88):502-517, BIBL. 516-517, TABS.
May 1961 41.8 AM3A
AnimaI diseases, Cattle.

15434-68
ANTIBODY RESPONSE TO A COMBINED LIVING ATTENUATED DISTEMPER - HEPATITIS VACCINE.
S E Piercy R F Sellers
Res Vet Sci 1(1):84-94, TABS.
Jan 1960 41.8 R312

Antibodies, Vaccines.

15435-68
EXPERIMENTAL INACTIVATED-VIRUS HOG CROLERA VACCINES' INDUCTION PERIOD OF IMMUNITY.
E I Pilcbard
Amer J Vet Res 28(125), 915-923 REF
Jul 1967 41.8 AM3A
Rordetella pertussis, Rog cholera virus, Hydracrylic acid beta-lactone, Immunization, Swine, Vaccines.
Abstract

15436-68
EPIZOOTIC HEMORRHAGIC DISEASE IN WHITE-TAILED DEER- CHARACTERISTIC OF THE SOUTH DAKOTA STRAIN OF VIRUS.
E C Pirtle J M Layton
Amer J Vet Res 22(86):104-108,
Jan 1961 41.8 AM3A
Deer, Epizootic diseases, Livestock diseases, Red water disease.

15437-68
CYTOGENETIC ALTERATIONS IN SWINE KIDNEY CELLS PERSISTENTLY INFECTED WITH ROG CROLERA VIRUS AND PROPAGATED WITH AND WITHOUT ANTISERUM IN TRE MEDIUM.
E C Pirtle L K Woods
Amer J Vet Res 29(1):153-164 REF
Jan 1968 41.8 AM3A
Antiserum, Cytogenetics, Rog cholera virns, Swine.
Abstract

15438-68
ISOLATION OF LISTERIA MONOCYTOGENES FROM BRAINS OF RABIES-NEGATIVE ANIMALS.
R Pittman W R Cberry
Amer J Vet Res 28(124)0779,MAP REF
May 1967 41.8 AM3A
Brain, Georgia, Listeriosis, Rabies, Wildlife.

15439-68
THE GLYCEROLIPIDS OF MYCOPLASMA MYCOIDES.
P Plackett
Riocbemistry 6(9):2746-2754 REF
Sep 1967 381 B523
C14, Glycolipides, Mycoplasma mycoides, Pbospbolipids, Virus diseases (animals).
Abstract

15440-68
CLINICAL EXPERIENCES WITH LINCOMYCIN--A NEW ANTIBIOTIC.
J M Prewitt
Vet Med/small Anim Clin 62(7):630-632
Jul 1967 41.8 M69
Dogs.
In the treatment of dogs with a variety of diseases.

15441-68
STUDIES ON PASTEURELLA ANATIPESTIFER INFECTION IN WRITE PEKIN DUCKS.
J Price
Avian Dis 3(4):486-487
Nov 1959 41.8 AV5
Ducks, Fowl cbolera, Pekin ducks.

15442-68
THE INFLUENCE OF TEREPRTRALIC ACID ON OXYTETRACYCLINE SERUM LEVELS IN CHICKENS, STUDIES ON MODE OF ACTION, I.
K E Price Z Zolli Jr
Avian Dis 3(2):157-169, TABS.
May 1959 41.8 AV5
Cbickens, Oxytetracycline, Serum.

15443-68
CYTOLOGIC CHANGES INDUCED BY INFECTIOUS CANINE REPATITIS VIRUS IN TISSUE CULTURE.
J E Prier
Amer J Vet Res 22(88):614-617
May 1961 41.8 AM3A
Cytology, Infectious canine bepatitis virns, Tissne cultnre.

15444-68
IMPROVED STAINING METROD FOR LEUCOCYTE COUNT OF POULTRY.
(GE
Z Procbazka
Arcb Exp Veterinarmed 21(2):603-607 REF
May 1967 41.8 EX7
Poultry, Staining.
Abstract

15445-68
VERTEBRAL BIOPSY IN CATTLE.
G T Purvance L G Transtrum
Amer Vet Med Ass J 151(6), 716-718.
15 Sep 1967 41.8 AM3
Biopsy, Cattle, Fluorine, Poisoning, Vertebrae.
Abstract

15446-68
EFFECTS OF FLUORIDE ON MAGNESIUM DEFICIENCY IN THE GUINEA PIG.
R E Pyke W G Hoekstra P R Phillips
J Nutr 92 _3), 311-316 REF
Jul 1967 389.6 J82
Calcinosis, Fluorides, Guinea pigs, Magnesium.
Abstract included.

15447-68
CLINICAL MANAGEMENT OF NEONATAL DIARRHEA IN CALVES, WITH SPECIAL REFERENCE TO PATHOGENISIS AND DIAGNOSIS.
O M Radostits
Amer Vet Med Ass J 147(12)'1367-1376, 44 REFS.
15 Dec 1965 41.8 AM3
Calves, Diarrbea, Escbericbia.

15448-6R
A VARIANT TYPE OF INFECTIOUS BRONCHITIS VIRUS IN A COMMERCIAL VACCINE.
L G Raggi
Avian Dis 4(3):312-319
May 1960 41.8 AV5
Immunology, Infectious broncbitis virus.

15449-68
RESPONSE OF BIRDS TO ONE INTRANASAL VACCINATION WITH B-1 STRAIN OF NEWCASTLE DISEASE VIRUS.
L G Raggi G G Lee
Avian Dis 4(2):167-195, BIBL. 194-195
May 1960 41.8 AV5
Birds, Immunization, Immunology, Newcastle disease vaccines, Virnses.

15450-68
CONJUNCTIVITIS IN CHICKENS CAUSED BY A TYPICAL INFECTIOUS LARYNGOTRACBEITIS VIRUS.
L G Raggi W H Armstrong
Avian Dis 4(3):272-274
May 196U 41.8 AV5
Chickens, Conjunctivitis, Infectious laryngotracbeitis virus.

15451-68
COEXISTENCE OF INFECTIOUS BRONCHITIS AND INFECTIOUS LARYNGOTRACBEITIS.
L G Raggi J Asmar G G Lee
Avian Dis 11(3):419-426 REF
Aug 1967 41.8 AV5
Immunization, Infectious broncbitis, Infectious laryngotracbeitis, Mycoplasmosis, Poultry, Synergism.
Abstract

15452-68
PATROGENIS AND PREVENTION OF INFECTIOUS DIARRHEA (SCOURS) OF NEWBORN CALVES.
R C Reisinger
Amer Vet Med Ass J 147(12)'1377-1386, 66 REFS.
15 Dec 1967 41.6 AM3
Calves, Diarrbea, Escbericbia, Scours.

15453-68
STUDIES IN ANAPLASMOSIS. III. AN AUTOANTIBODY AND SYMPTOMATIC MACROCYTIC ANEMIA.
M Ristic
Amer J Vet Res 22(9U):871-876
Sep 1961 41.8 AM3A
Anaplasmosis, Anemia.

15454-68
AN IN VITRO STUDY OF EXTRACTED ANTIGENS OF VIBRIO FETUS ISOLATES.
G W Robertstad S M Morrison
Amer J Vet Res 22(87):327-329
Mar 1961 41.8 AM3A
Antigens, Vibrio fetus bacterins.

15455-68
EXPERIMENTAL HYPOPITUITARISM IN SWINE: A STEREOTAXIC METHOD OF INDUCING TRE CONDITION WITH BETA IRRADIATION.
Of Roesel G M Meher
Amer J Vet Res 28(125)01181-1190 REF
Jul 1967 41.8 AM3A
Beta rays, Radiation, Stereotropism, Swine.
Abstract

15456-68
TOXOCARA LESIONS STIMULATE THOSE OF ASCARIS SUUM.
Otto Boneus
Amer Vet Med Ass J 147(11)'1214
01 Dec 1965 41.8 AM3
Ascaris, Liver diseases, Swine, Toxocara.

15457-68
THE ETIOLOGY OF LEGUME BLOAT-NONVOLATILE ACIDS.
W G Rosen H Fassel R E Nichols
Amer J Vet Res 22(86):117-122, BIBL. 121
Jan 1961 41.8 AM3A
Acids, Bloat, Etiology, Legumes, Poisonons plants.

15458-68
BUOYANT DENSITY OF AFRICAN HORSESICKNESS VIRUS.
R Russell
Nature 215(5104), 983-984
26 Aug 1967 472 N21
African borse sickness virus, Density, Virus diseases (animals).

15459-68
AVIAN ENCEPHALOMYELITIS IMMUNIZATION WITH INACTIVATED VIRUS.
K Schaaf
Avian Dis 3(3):245-256
Aug 1959 41.8 AV5
Avian encepbalomyeIitis, Immunization.

15460-68
BIOLOGY OF VECTOR-ASSOCIATED DISEASES IN VIETNAM.
R G Scott
Amer Vet Med Ass J 151(12):1741-1750,MAP
15 Dec 1967 41.8 AM3
Armed forces, Artbropoda, Diseases, Humans, Insect vectors.

15461-68
ELECTRON MICROSCOPY OF ANAPLASMA MARGINALE IN THE BOVINE ERYTHROCYTE.
W L Scott J C Geer L E Foote
Amer J Vet Res 22(9U):877-881
Sep 1961 41.8 AM3A
Cattle, Electron microscopy.

15462-68
AVIAN INFECTIOUS HEPATITIS III. TREATMENT OF CRICKENS IN EGG PRODUCTION.
M Sevoian R W Calnek
Avian Dis 3(3):302-311
Aug 1959 41.8 AV5
Animal breeding, Chickens, Therapentics.

15463-6R
A QUICK METHOD FOR THE DIAGNOSIS OF AVIAN POX AND INFECTIOUS LARYNGOTRACHEITIS.
M Sevoian
Avian Dis 4(4):474-477, PLS.
Nov 1960 41.8 AV5
Animal bistology, Avian poxviruses, Diagnosis, Infectious laryngotracbeitis, Virology.

15464-68
A COCCIDIA-LIKE ORGANISM ASSOCIATED WITH SUBCUTANEOUS GRANULOMATA IN A DOG.
G C Sbelton L D Kintner D O MacKintosh
Amer Vet Med Ass J 152(3):263-267
U1 Feb 1968 41.8 AM3
Dogs, Granuloma.
Abstract

15465-68
IMMUNE RESPONSE TO SHEEP ERYTHROCYTES WITH CYTOXAN AND HYPAROXIA.
R V Siegel
Life Sci 6(10,PT.2)01009-1U12
15 May 1967 442.8 L62
Cyclophosphamide, Erythrocytes, Immunization, Sbeep.

15466-68
AUREOMYCIN CHLORTETRACYCLINE AS A PREVENTIVE FOR EXPERIMENTAL SYNOVITIS IN CHICKENS.
L M Skamser K C Seeger
Avian Dis 4(1):42-48, BIBL. 47-48
Feb 196U 41.8 AV5
Cbickens, Chlortetracycline, Preventive medicine, Synovitis.

30 15467-6B

15467-6B
THE EFFECT OF THE USE OF ANTIBACTERIAL DRUGS, PARTICULARLY AS FOOD ADDITIVES, ON THE EMERGENCE OF DRUG-RESISTANT STRAINS OF BACTERIA IN ANIMALS.
H W Smith
New Zeal Vet J 15(9):153-166, REF.
41.B N4B3
Antibiotics, Bacteria, Mycoplasma gallisepticum, Oxytetracycline, Penicillin, Salmonella typhimurium, Staphylococcus aureus, Tetracycline.

15468-66
THE DEVELOPMENT OF PETECHIAL HAEMORRHAGES ON THE UNDER-SURFACE OF THE TONGUE OF THE HORSE AND ITS RELATION TO INFECTION WITH THE VIRUS OF EQUINE INFECTIOUS ANAEMIA). DAS AUFTRETEN VON PUNKTBLUTUNGEN AUF DER ZUNGENUNTERFLACHE DES PFERDES UND SEINE BEZIEHUNG ZUR INFEKTION MIT DEM VIRUS DER INFEKTIOSEN ANAMIE. (GE)
W Steck
Zentralb Veterinarmed Reihe A 14(4):348-365 REF
Jun 1967 41.B Z5
Hemorrhage, Horses.

15469-6B
IMMUNISATION OF SHEEP WITH MULTI-COMPONENT CLOSTRIDIAL VACCINES.
M Sterne I Batty A Thompson J M Robertson
Vet Rec 74(34)'909-913, 10 REFS., 5 TABS.
25 Aug 1962 41.8 V641
Clostridium chauvei bacterins, Immunization, Sheep, Vaccines.

15470-68
EXPERIENCE WITH FOWL POX VACCINATION.
D E Stover
Avian Dis 4(3):309
May 1960 41.8 AV5
Fowlpox, Immunization.

15471-68
STUDY OF CHICKEN SARCOMA (STRAIN 13) BY VENT EXPOSURE.
E L Stubbs F G Sperling A M Wallbank
Amer J Vet Res 22(89):813-814
Jul 1961 41.8 AM3A
Neoplasms, Sarcoma.

15472-6B
STUDY OF CHICKEN SARCOMA (STRAIN 13) PLACED IN THE BURSA OF FABRICIUS.
E L Stubbs F G Sperling
Amer J Vet Res 22(86):154-155
Jan 1961 41.B AM3A
Chickens, Sarcoma.

15473-6B
DEMONSTRABLE ANTIGENS AND A TOXIC FACTOR IN OEDEMA DISEASE OF SWINE.
E J Sweeney W J Sojka M K Lloyd
Res Vet Sci 1(3):260-26B, TABS.
Jul 1960 41.B R312
Antigens, Baby pigs, Edema.

15474-6B
SITE OF LOCALIZATION AND EFFECTS OF SWINE NASAL VIRUS IN EXPERIMENTAL PIGS.
W P Switzer E D Roberts C L'Ecuyer
Amer J Vet Res 22(B6):67-71
Jan 1961 41.8 AM3A
Swine, Virus diseases (animals).

15475-6B
ELECTRON MICROSCOPY OF INFECTIOUS CANINE HEPATITIS VIRUS GROWN IN CULTURES OF CANINE KIDNEY CELLS.
M Tajima T Motohashi T Samejima
Amer J Vet Res 22(B7):236-249, BIBL. 24B-249
Mar 1961 41.8 AM3A
Electron microscopy, Infectious canine hepatitis, Tissue culture.

15476-6B
ELECTRON MICROSCOPY OF EQUINE ABORTION VIRUS.
M Tajima T Shimizu R Ishizaki
Amer J Vet Res 22(B7):250-265, BIBL. 264-265
Mar 1961 41.B AM3A
Electron microscopy, Equine rhinopneumonitis.

15477-6B
CLINICAL AND HEMATOLOGIC STUDIES OF LYMPHOSARCOMA IN A HERD OF CATTLE.
G H Theilen O W Schalm V Gilmore
Amer J Vet Res 22(B6):23-30, BIBL. 30, TABS.
Jan 1961 41.B AM3A
Cattle, Lymphosarcoma, Neoplastic diseases.

1547B-6B
INGESTION OF AMMI VISNAGA SEEDS AND PHOTOSENSITIZATION - THE CAUSE OF VESICULAR DERMATITIS IN FOWLS.
H Trenchi
Avian Dis 4(3):275-2B0, BIBL. 279-280
May 1960 41.B AV5
Dermatitis, Feed, Photosensitization, Poultry, Seeds.

15479-6B
EFFECTS OF VITAMIN-A DEFICIENCY AND HIGH-LEVEL CHLORTETRACYCLINE ON EXPERIMENTAL CANDIDIASIS OF TURKEYS.
S R Tripathy S G Kenzy W J Mathey
Avian Dis 11(3):327-335 REF
Aug 1967 41.B AV5
Chlortetracycline, Deficiency diseases, Moniliasis, Poultry, Vitamin a.
Abstract

154B0-6B
A BACTERIAL AGENT CAUSING BLUECOMB DISEASE IN TURKEYS. 1. ISOLATION AND PRELIMINARY LABORATORY INVESTIGATIONS.
R R Truscott M C Connell A E Ferguson C G Wills
Avian Dis 4(4):391-401
Nov 1960 41.B AV5
Bacteriology, Blue comb.

154B1-6B
VIRUSES, SERUMS, TOXINS, AND ANALAGOUS PRODUCTS. NOTICE OF EXTENSION OF TIME TO SUBMIT WRITTEN DATA, VIEWS, OR ARGUMENTS.
Fed Regist 32(114):B529
14 Jun 1967 L1.451
Drugs, Toxins, Viruses.
In relation to veterinary medicine.

154B2-6B
NOTICE OF FILING OF PETITION FOR FOOD ADDITIVES.
Fed Regist 32(124):9178
2B Jun 196B L1.451
Bacitracin methylenedisalicylic acid, Cattle, Diethylstilbestrol, Feed additives.

154B3-6B
NOTICE OF FILING OF PETITION FOR FOOD ADDITIVE BIURET.
Fed Regist 32(115):B626
15 Jun 1967 L1.451
Biuret, Feed additives, Ruminants.

154B4-6B
FOOD ADDITIVES PERMITTED IN THE FEED AND DRINKING WATER OF ANIMALS OF FOR THE TREATMENT OF FOOD-PRODUCING ANIMALS. FOOD ADDITIVES PERMITTED IN FOOD FOR HUMAN CONSUMPTION. ERYTHROMYCIN.
Fed Regist 32(11B):B753
20 Jun 1967 L1.451
Cattle, Erythromycin, Feed additives, Food contamination, Mastitis.

154B5-6B
FACTORS PRODUCING EMBRYONIC AND FETAL ABNORMALITIES, DEATH, AND ABORTION IN SWINE. EXCERPTS FROM THE SYMPOSIUM ON FACTORS PRODUCING EMBRYONIC AND FETAL ABNORMALITIES, DEATH, AND ABORTION IN SWINE, SPONSORED BY THE NATIONAL ACADEMY OF SCIENCE, U.S. LIVESTOCK SANITARY ASSOCIATION, AND AGRICULTURAL RESEARCH SERVICE, U.S. DEPARTMENT OF AGRICULTURE. OCTOBER 2-3, 1967, CHICAGO, ILLINOIS.
Amer Vet Med Ass J 152(1):37-40
01 Jan 196B 41.B AM3
Abnormalities, Abortion, Death, Fetal death, Swine, Symposia.

154B6-6B
CASE REPORT- BOTULISM TYPE C OUTBREAK ON A PHEASANT GAME FARM.
S Vadlamudi V H Lee R P Hanson
Avian Dis 3(3):344-350
Aug 1959 41.B AV5
Botulism, Farms, Pheasants.

154B7-6B
LYMPHOSARCOMA IN THE RABBIT. A CASE REPORT AND GENERAL REVIEW.
K R Van Kampen
Cornell Vet 5B(1):121-12B REF
Jan 196B 41.B CB1
Enteritis, Lymphosarcoma, Rabbit septicemia, Rabbits.
Abstract

15488-68
STUDIES ON INFECTION AND IMMUNITY WITH THE LUNGWORM, DICTYOCAULAS VIVIPARUS (BLOCH). I. ACTIVE IMMUNIZATION OF GUINEA PIGS AND RABBITS.
A E Wade L E Swanson L E Fox
Amer J Vet Res 22(86):123-127, TABS
Jan 1961 41.8 AM3A
Dictyocaulas viviparus, Guinea pigs, Immunization, Rabbits.

15489-68
BOVINE PAPULAR STOMATITIS, PSEUDO-COW-POX AND MILKER'S NODULES.
J Wagington I M Lauder J S Smith
Vet Rec 81(13):306-313, REF.
23 Sep 1967 41.8 V641
Humans, Milkers' nodules, Pseudocowpox.
Abstract

15490-68
STUDIES ON THE TRANSMISSION AND PATHOLOGY OF A VIRAL-INDUCED AVIAN NEPHRABLASTOMA (EMBRYONAL _EPHROMA).
W G Walter R R Burmester C H Cunningham
Avian Dis 6(4):455-477, BIBL. 475-477, PL., TABS.
Nov 1962 41.8 AV5
Avian leukosis complex, Nephroblastoma.

15491-68
THE THERAPEUTIC VALUE OF TERRAMYCIN-TPA ON CRD.
C R Weston R G Strout J R Reckman
Avian Dis 3(4):486
Nov 1959 41.8 AV5
Chronic respiratory disease, Drug therapy, Oxytetracycline.

15492-68
AN INDIRECT GEL DIFFUSION PRECIPITATION TEST FOR THE DETECTION OF RINDERPEST ANTIBODY IN CONVALESCENT CATTLE.
G White G R Scott
Res Vet Sci 1(3):226-229
Jul 1960 41.8 R312
Antibodies, Cattle, Rinderpest virus.

15493-68
THE CULTIVATION AND MODIFICATION OF THE AVIAN INFECTIOUS SYNOVITIS AGENT IN TISSUE CULTURE.
R W Wicbman R A Rankowski A J Da Massa
Avian Dis 4(2):152-164, TABS.
May 1960 41.8 AV5
Infectious synovitis, Tissue culture.

15494-68
EXPERIMENTAL PHOTOSENSITIZATION BY SPRING PARSLEY (CYMOPTERUS WATSONII) IN CHICKS.
M C Williams W Binns
Amer J Vet Res 29(1):111-115 REF
Jan 1968 41.8 AM3A
Cymopterus watsonii, Photosensitization, Poultry, Toxicity, Weeds.
Abstract

15495-68
REVACCINATION OF CHICKENS AGAINST NEWCASTLE DISEASE BY VENT, WING-WEB, AND INTRAMUSCULAR ROUTES.
R W Winterfield S R Hitchner
Avian Dis 5(1):18-24, TABS.
Feb 1961 41.8 AV5
Birds, Chickens, Intramuscular vaccination, Newcastle disease, Poultry, Vent vaccination, Viral vaccines, Virus diseases (animals), Wing-web vaccination.

15496-68
HATCHERY SANITATION AS A CONTROL MEASURE FOR ASPERGILOSSIS IN FOWL.
M L Wright G W Anderson N A Epps
Avian Dis 4(4):369-379, TABS., PLS.
Nov 1960 41.8 AV5
Aspergillosis, Poultry hatcheries, Sanitation.

15497-68
HATCHERY SANITATION.
M L Wright G W Anderson N A Epps
Avian Dis 3(4):486
Nov 1959 41.8 AV5
Poultry hatcheries, Sanitation.

15498-68
FOOT-AND-MOUTH DISEASE VIRUS. II. PROPAGATION AND MODIFICATION OF 3 IMMUNOLOGIC TYPES OF VIRUS IN EMBRYONATING CHICKEN EGGS.
G E D Zahran
Amer J Vet Res 22(88):527-532, TABS.
May 1961 41.8 AM3A
Chick embryos, Foot-and-mouth disease virus.

15499-68
FOOT-AND-MOUTH DISEASE VIRUS. I. PROPAGATION OF 3 IMMUNOLOGIC TYPES OF VIRUS IN CHICKS.
G E D Zahran
Amer J Vet Res 22(88):518-526, BIBL. 525-526, TABS.
May 1961 41.8 AM3A
Chicks, Foot-and-mouth disease virus.

15500-68
ASPERGILLOSIS EXPERIMENTALLY PRODUCED IN HATCHING CHICKS.
D C O'Meara H L Chute
Avian Dis 3(4):404-406
Nov 1959 41.8 AV5
Aspergillosis, Chickens.

Arthropods

15501-68
SEXUAL STERILIZATION OF SCREW-WORM FLIES BY N,N'-TETRAMETHYLENEBIS(1-AZIRIDINECARBOXAMIDE): INFLUENCE OF ROUTE OF ADMINISTRATION.
M M Crystal
J Econ Entomol 61(1):134-139 REF
Feb 1968 421 J822
Chemosterilants, Cochliomyia hominivorax, Sterilization.
Abstract

15502-68
FIELD TESTS WITH INSECTICIDES FOR CONTROL OF LONE STAR TICKS ON CATTLE.
R O Drummond R Moore M J Wrich
J Econ Entomol 53(5)'953-955, 1 REF.
Oct 1960 421 J822
Amblyomma, Carbaryl, Cattle, Coumaphos, Dioxathion, Lindane, Malathion, Ronnel, Toxaphene, Trichlorfon.

15503-68
FEED ADDITIVES FOR CONTROL OF HOUSE FLY LARVAE IN LIVESTOCK FECES.
T L Harvey J R Brethour
J Econ Entomol 53(5)'774-776, TABS.
Oct 1960 421 J822
Bacillus thuringiensis, Disodium octoborate tetranydrate, Feces, Feed additives, Livestock, Musca domestica, Polybor 3.

15504-68
DUST CONTAINING BACILLUS THURINGIENSIS FOR CONTROL OF CHICKEN BODY, SHAFT, AND WING LICE.
R A Hoffman R E Gingrich
J Econ Entomol 61(1):85-88
Feb 1968 421 J822
Bacillus thuringiensis, Chickens, Dusting, Equipment, Lipeurus caponis, Menopon gallinae, Thuricide.

15505-68
COMPARATIVE EFFICIENCY OF COUMAPROS APPLICATIONS ON VARIOUS BODY AREAS BY BRUSH-ON OR POUR-ON FOR THE CONTROL OF CATTLE GRUBS.
A R Roth W M Rogoff
J Econ Entomol 60(6):1754-1755
Dec 1967 421 J822
Cattle, Coumaphos, Hypoderma bovis, Hypoderma lineatum, Insecticide application.

15506-68
ACARICIDA TESTS ON THE BIARRA STRAIN OF ORGANOPHOSPHORUS RESISTANT CATTLE TICK BOOPHILUS MICROPLUS FROM SOUTHERN QUEENSLAND.
W J Ronlston R H Wharton
Australian Vet J 43(4):129-134
Apr 1967 41.8 AU72
Acaricides, Boophilus annulatus microplus, Cattle, Insecticide resistant insects, Ixodides.
Abstract

15507-68
CONTROL OF THE SNAKE MITE (OPHIONYSSUS NATRICIS), OTHER MITES, AND CERTAIN INSECTS WITH THE SORPTIVE DUST, SG 67.
I R Tarshis

30 15508-68

J Econ Entomol 53(5):903-908, 14 REFS.
Oct 1960 421 JB22
Ammonium fluosilicate, SG 67, Lizards, Ophionyssus, Snakes.

15508-68
METHOD FOR TREATING ANIMALS INFESTED WITH PESTS OF THE PHYLUM ARTHROPODA. PATENT 3,367,831.
S J M Walker
Os Patent Office Offic Gaz 847(1):230
06 Feb 1968 156.65 OF2
Arthropoda, Chemical control (insects), Livestock, Patents, Pesticides, Sodium bicarbonate, Sodium hexadecyl sulfate.

Parasites

15509-68
CELLULAR RESPONSE TO ENDOGENOUS STAGES OF COCCIDIA IN CATTLE, WITH OBSERVATIONS OF THE INFLUENCE OF CHEMICALS UPON THE HOST-PARASITE RELATIONSHIP.
A Arakawa
Diss Abstr Sect B 28(3):1260B
Sep 1967 Z5055.U49D53
Calves, Cells, Coccidiosis, Parasitism, Sulfamethazine.

15510-68
SELECTIVE STAINING OF RICKETTSIA RUMINANTIUM IN TISSUE SECTIONS.
M L Burdin
Vet Rec 74(48):1371-1372, 5 REFS.
01 Dec 1962 41.8 V641
Rickettsia.

15511-68
THE SPECTROPHOTOFLUOROMETRIC DETERMINATION OF BUQUINOLATE IN POULTRY TISSUE AND EGGS.
P L Cox R D Bollifield J P Neotis
Poultry Sci 46 _3), 680-686
May 1967 47.8 AM33P
Buquinolate, Coccidiostats, Pesticide residues, Poultry, Spectrophotofluorometry.

15512-68
FIELD TRIALS WITH HYGROMYCIN AS AN ANTHELMINTIC IN POULTRY.
M N Frazier
Avian Dis 3(4):478-484, BIBL. 483-484, TABS.
Nov 1959 41.8 AV5
Anthelmintics, Poultry.

15513-68
CATTLE GRUB CONTROL WITH BAYER 21-199 IN THE EVERGLADES.
W G Genung C E Haines
Fla Entomol 42(4):155-157
Dec 1959 420 E662
Cattle, Coumaphos, Hypoderma, Florida.

15514-68
SURVEY ON THE HELMINTHS OF DROMEDARY IN CHAD, WITH SPECIAL REFERENCE TO GASTRO-INTESTINAL STRONGYLOSIS AND HAEMONCHOSIS (HAEMONCHUS LONGISTIPES). (FR)
M Graber R Taho J Service
Rev Elevage Med Vet Pays Trop (N.S.)20(2):227-254,MAP REF
1967 41.8 R3262
Camels, Haemonchosis, Nematodes, Strongylosis.
Abstract

15515-68
ANTHELMINTIC ACTIVITY OF AN ORGANIC PHOSPHATE IN CATTLE AND SHEEP.
J F Landram B J Shaver
Amer J Vet Res 22(90):893-898, TABS.
Sep 1961 41.8 AM3A
Anthelmintics, Cattle, Phosphates, Sheep.

15516-68
CHEMICAL OVICIDAL MEASURES AS APPLIED TO TAENIA HYDATIGENA, TAENIA OVIS, TAENIA PISIFORMIS, AND ECHINOCOCCUS GRANULOSUS.
G F Laws
Exp Parasitol 20_1)027-37, REF.
Feb 1967 436.8 EX7
Cestoda, Dogs, Echinococcus granulosus, Humans, Ovicides, Taenia hydatigena, Taenia ovis, Taenia pisiformis.

15517-68
BOVINE BABESIOSIS. THE PASSIVE IMMUNIZATION OF CALVES AGAINST BABESIA ARGENTINA WITH SPECIAL REFERENCE TO THE ROLE OF COMPLEMENT FIXING ANTIBODIES.
D F Mahoney
Exp Parasitol 20_1)0119-124
Feb 1967 436.8 EX7
Antibodies, Babesia argentina, Cattle, Complement fixation, Immunization, Piroplasmosis.

15518-68
THREE GASTRO-INTESTINAL NEMATODES RECENTLY RECORDED FROM BRITISH CATTLE.
J H Rose
Res Vet Sci 1(1):10-16
Jan 1960 41.8 R312
Cattle, Nematodes.

15519-68
SURVIVAL OF INFECTIVE LARVAE OF THE CATTLE NEMATODES, COOPERIA PUNCTATA, TRICHOSTRONGYLUS AXEI, AND OESOPHAGOSTOMUM RADIATUM.
J C Williams B L Mayhew
Amer J Vet Res 28(124):629-640
May 1967 41.8 AM3A
Cattle, Cooperia punctata, Ecology, Larvae, Nematodes, Trichostrongylus axei.

15520-68
TOXICITY OF TOPICALLY APPLIED FATS AND OILS.
W D Woods E L Mccune
Soc Exp Biol Med Proc 125 (1), 124-127
May 1967 442.9 SO1
Fats, Oils, Poultry, Skin, Toxicology.

40 COMMODITY PROTECTION

Storage Diseases

15521-68
CONTROL OF DISEASES OF SHALLOTS.
B Aycock J M Jenkins Jr
J Sci Food Agr 12(6)'I-281-2
Jun 1961 382 S012
Captan, Dowicide B, Fungus diseases (plants), Na2,4,5-trichlorophenoxide, Pentachloronitrobenzene, Shallots.

15522-68
AMMONIA INJURY TO APPLES AND PEACHES IN STORAGE.
E Brennan I Leone B B Daines
Plant Dis Rep 46(11):792-795, TABS.
15 Nov 1962 1.9 P69P
Ammonia, Apples, Peaches.

15523-68
REDUCTION OF POST-HARVEST DECAY IN RASPBERRIES WITH SO2.
B A Cappellini A W Stretch G S Walton
Phytopathology 51(8):575
Aug 1961 464.8 P56
Raspberries, Sulfur dioxide.

15524-68
EFFECT OF MOISTURE CONTENT AND LENGTH OF STORAGE PERIOD UPON GERMINATION PERCENTAGE OF SEEDS OF CORN, WHEAT, AND BARLEY FREE OF STORAGE FUNGI.
C M Christensen
Phytopathology 54(12):1464-1466
Dec 1964 464.6 P56
Barley, Corn, Food storage, Humidity, Seed viability, Wheat.

15525-68
INVASION OF AND DAMAGE TO BEAN SEED BY STORAGE FUNGI.
L C Lopez F. C M Christensen
Plant Dis Rep 46(11):785-789
15 Nov 1962 1.9 P69P
Beans.

15526-68
POLYETHYLENE LINERS AND FUNGICIDES FOR PEACHES AND NECTARINES.
D A Luvisi N F Sommer
J Sci Food Agr 12(6)'I-299-2
Jun 1961 362 S012
Dehydroacetic acid, Na o-phenylphenate, Nectarines, Peaches, Polyethylene, Storage diseases.

15527-68
EFFECT OF STORAGE ENVIRONMENT ON QUALITY OF TABLE GRAPES AND ON REQUIREMENTS OF SULFUR DIOXIDE FUMIGATION PROGRAM.
K E Nelson G A Baker
Phytopathology 52(8):745-746
Aug 1962 464.8 P56
Fumigation, Grapes, Sulfur dioxide.

15528-68
TEMPERATURE FACTORS IN THE CONTROL OF BLACK SPOT OF CITRUS.
B J Smith
Plant Dis Rep 46(7):487-491, TABS
15 Jul 1962 1.9 P69P
Black spot (citrus).

Arthropods

15529-68
TIMBER PESTS AND DISEASES. 1ST ED. TA422. F5.
W P K Findlay
280 P., REF.
1967
Insect pests, Lumber preservation, Timber, Wood destroying fungi, Wood staining fungi.

15530-68
COMPARISON OF FIELD CORN VARIETIES FOR RESISTANCE TO CORN EARWORM AND STORED GRAIN INSECT INJURY IN THE EVERGLADES.
V E Green Jr
Fla Entomol 42(1):11-16, 9 REFS., 1 TAB.
Mar 1959 420 F662
Corn, Crop varieties, Heliothis zea, Storage injuries.

15531-68
QUINOID SECRETIONS IN GRAIN AND FLOUR BEETLES.
B K Ladisch S K Ladisch P M Howe
Nature 215(5104), 939-940 REF
26 Aug 1967 472 N21
Flour, Grain, Quinones, Tenebrionidae.

15532-68
INFLUENCE OF PRE-STORAGE TREATMENTS ON THE MORTALITY OF THE SAN JOSE SCALE (HOMOPTERA: DIASPIDIDAE) ON APPLES HELD IN STORAGE.
C V G Morgan B J Angle
Can Entomol 99(9):975-978
Sep 1967 421 C16
Apples, Aspidiotus perniciosns, Chemical control (insects), Diphenylamine, Ethoxyquin, Methanol, Mortality, Storage.
Abstract

15533-68
MORTALITY OF THE SAN JOSE SCALE (HOMOPTERA: DIASPIDIDAE) ON STORED APPLES OF DIFFERENT VARIETIES AND HARVEST DATES.
G V G Morgan B J Angle
Can Entomol 99(9):971-974
Sep 1967 421 C16
Apples, Aspidiotus perniciosns, Chemical control (insects), Crop varieties, Harvesting date, Mortality, Storage.
Abstract

15534-68
NOTE ON STAINING AS AN AID IN COUNTING VINEGAR EELWORMS IN VINEGAR.
B Stein W V Eisenberg P M Brickey
Ass Offic Anal Chem J 50(3):519-520
Jun 1967 381 AS7
Filter paper, Food contamination, Nematodes, Staining, Vinegar.

Microbial Contamination

15535-68
A SURVEY TO DETERMINE THE SALMONELLA CONTAMINATION RATE IN LIVESTOCK AND POULTRY FEEDS.
J N Allred J W Walker V C Beal F W Germaine
Amer Vet Med Ass J 151(15):1857-1860 REF
15 Dec 1967 41.8 AM3
Feed, Food contamination, Livestock, Poultry, Salmonella, Surveys.
Abstract:
this work indicates that a reduction in salmonella contamination of animal by-product ingredients and the pelleting of finished feeds would be the logical approach to lower the salmonella rate in swine and poultry feed.

15536-68
DESTRUCTION OF SALMONELLA DURING SLAUGHTERING OF SWINE; IMPORTANCE OF SCALDING. (FR)
A Granville L Fievez J Van Roof P Ghenne A Lokolo
J Med Entomol 111_2);73-83
Mar 1967 421 J82R
Salmonella, Sanitation, Slaughtering, Swine.
English summary.

15537-68
DETECTION AND IDENTIFICATION OF SALMONELLA FROM DRIED WHOLE EGG, DRIED EGG YOLK, AND DRIED EGG WHITE: REPORT OF A COLLABORATIVE STUDY.
P L Poelma
Ass Offic Anal Chem J 50(4):753-763
Aug 1967 381 AS7
Agar, Eggs, Food contamination, Salmonella.
Abstract

50 15538-68

50 ENVIRONMENTAL CONTAMINATION

15538-68
CHARACTERIZATION OF THE PLANT DAMAGE PROBLEM BY AIR POLLUTANTS IN NEW JERSEY.
E Brennan I A Leone E H Daines
Plant Dis Rep 51(10):850-854 MAP REF
Oct 1967 1.9 P69P
Air pollution, Ozone, Plant injuries, Sulfites, Sulfur dioxide.
Plant damage has been observed in New Jersey when elevated concentrations of sulfur dioxide, ozone, peroxyacetylnitrate or bisulfite-addition product (possibly aldehyde) occur in the ambient air. certain plant species can be cited as particularly sensitive to each of the pollutants. at present ozone appears to be the principal air pollutant from the point of view of number of plant species affected and the frequency of occurrences of phytotoxic levels. the extent of damage to a plant by a particular pollutant in any given year depends not only on the presence of a source for that pollutant and of plants susceptible to it, but also on the existence of meteorological factors that lead to air stagnation.

15539-68
THE BEHAVIOR OF INSECTICIDES IN FOREST SOILS.
S P Gessel D W Cole H Riekerk
6 P. (TYPEWRITTEN)
1967
Forest soils, Insecticide residues, Soil contamination.
Not in Nat. agr. libr.

15540-68
MICROCOULOMETRIC GAS CHROMATOGRAPHY ANALYSIS OF SELECTED HERBICIDES IN WATER.
D F Goerlitz W L Lamar
11 P.
Jan 1965
Chromatography, Colorimetry, D, 2,4-, Herbicide residues, T, 2,4,5-, Water pollution,
2-(2,4,5-trichlorophenoxy) propionic acid.
Not in nat. agr. libr.

15541-68
PERSISTENCE OF TWO SYSTEMIC CARBAMATE INSECTICIDES IN THREE TYPES OF SOILS.
D S Gupta W A Rawling
Indian J Entomol 28(4):482-493 REF
Dec 1966 420 IN23
Baygon, Carbamates, Insecticide residues, Isopropyl-3-methylpyrazol-5-yl dimethylcarbamate, 1-, Muck soils, Sand, Soil contamination, Systemic insecticides.

15542-68
VARIATIONS IN TOXICITY TO BLUEGILL SUNFISH OF PHENOXY HERBICIDES.
J S Hughes J T Davis
Weeds 11(1):50-53
Jan 1963 79.8 W41
Herbicides, Toxicology.

15543-68
BIOLOGICAL DECOMPOSITION OF HERBICIDES IN SOIL. I. MONO-AND TRICHLOROACETATE AND DICHLOROPROPIONATE.
H L Jensen
J Sci Food Agr 12(1)'I-22-4
Jan 1961 382 S012
Decomposition, Dichloropropionate, Sodium chloroacetate, Soil microorganisms, Trichloroacetate.

15544-68
THE BEHAVIOR OF DDT AND ZECTRAN ON A FOREST SOIL.
H Riekerk
2 P. (TYPEWRITTEN)
Jan 1968
Carbamates, Chlorinated hydrocarbons, Ddt, Forest soils, Insecticide residues, Soil contamination.
A progress report. not in Nat. agr. libr.

15545-68
METHODS FOR EXTRACTING INSECTICIDES FROM SOIL.
J I Teasley W S Cox
J Agr Food Chem 14(5):519-520
Sep 1966 381 JB223
Ddt, Endrin, Insecticide residues, Soil contamination.
Cotton field soil.

15546-68
ANALYTICAL PROCEDURES. IN METHOLOGY.
N.P. (MIMEOGRAPHED)
1966
Water pollution.
Not in Nat. agr. libr.

15547-68
INSECTICIDE ANALYSIS PROCEDURES USED BY THE KLAMATH BASIN STUDY. (PAPER PRESENTED AT PACIFIC NORTH WEST POLLUTION CONTROL ASSOCIATION, VANCOUVER, B.C.).
R E White
N.P.
03 Nov 1965
Insecticide residues, Water pollution.
Not in Nat. agr. libr.

15548-68
WATER POLLUTION CONTROL AND ABATEMENT. TD420.W45.
T L Willrich N W Hines
194 P AMES, IOWA STATE UNIVERSITY PRESS,
1967
Conferences, Pesticides, Sedimentation, Water pollution.
Proceedings of an Iowa water resources pollution control and abatement seminar held at Iowa State University, Ames, 1965.

55 RESIDUES

15549-68
RACREL CARSON INFLUENCE GAINS MOMENTUM AS BOOK APPEARS.
Agr Chem 17(11)'46-50, 157-159
Nov 1962 381 AG8
Pesticides, Public health, Rachel Carson.

15550-68
EXTRACTION OF CHLORINATED PESTICIDE RESIDUES FROM NONFATTY SAMPLES OF LOW MOISTURE CONTENT.
P F Bertuzzi L Kamps C I Miles J A Burke
Ass Offic Anal Chem J 50(3):623-627
Jun 1967 381 AS7
Acetonitrile, Chlorinated hydrocarbons, Ddt, Dieldrin, Feed, Insecticide residues, Methoxychlor.
Mixture of 35 percent water plus acetonitrile most effective
Abstract

15551-68
NOTE ON EXTRACTION OF A POLAR INSECTICIDE (IMIDAN) FROM MILK.
M C Bowman M Reroza
Ass Offic Anal Chem J 50(4):940-941
Aug 1967 381 AS7
Imidan, Milk.

15552-68
DETERMINATION OF NIAGARA NIA-10242 AND ITS PHENOL DEGRADATION PRODUCT IN CORN SILAGE AND MILK AND DETERMINATION OF OTHER CARBAMATES BY GLC OF THEIR THIOPHOSPHORYL DERIVATIVES.
M C Bowman M Reroza
Ass Offic Anal Chem J 50(4):926-933
Aug 1967 381 AS7
Carbamates, Chromatography, Corn, Degradation, Insecticide residues, Milk, Phenols, Silage.

15553-68
INFRARED IDENTIFICATION OF CHLORINATED INSECTICIDES IN THE TISSUES OF POISONED FISH.
H W Boyle R H Burttschell A A Rosen
19 P. REF. (MIMEOGRAPHED)
0000
Chlorinated hydrocarbons, Chromatography, Fishkill, Infrared spectra, Insecticide residues, Spectrophotometry, Water pollution.
Not in Nat. agr. libr.

15554-68
GUIDE TO THE ANALYSIS OF PESTICIDE RESIDUES. SB953.B8.
R P Burchfield D E Johnson E E Storrs
2 V. WASHINGTON, U. S. GOVERNMENT PRINTING OFFICE
1965
Handbooks, Pesticide residues.

15555-68
DDT IN HUMANS AND ANIMALS; DETERMINATION OF DDA IN URINE USING AN ION EXCHANGE RESIN.
C Cueto A G Barnes A M Mattson
J Agr Food Chem 4(11):943-945
Nov 1956 381 J8223
Ddt, Bumans, Insecticide residues, Ion exchange resins, Urine.

15556-68
THE DETERMINATION OF CHLORINATED INSECTICIDES IN HUMAN BLOOD.
W E Dale et. al.
N.P. (TYPEWRITTEN)
1966
Blood, Chlorinated hydrocarbons, Humans, Insecticide residues.
Not in Nat. agr. libr.

15557-68
FISH, WILDLIFE UNAFFECTED BY BOLL WEEVIL PROGRAM.
K Dorward
Agr Chem 20(9)'68
Sep 1965 381 AG8
Anthonomus grandis, Fish, Malathion, Pesticide residues, Wildlife.

15558-68
ANALYSIS OF CHLORINATED PESTICIDE RESIDUES IN FATS AND OILS, UTILIZING DIMETHYL SULFOXIDE: A COLLABORATIVE STUDY.
M Eidelman
Ass Offic Anal Chem J 50(3):591-595
Jun 1967 381 AS7
Chlorinated hydrocarbons, Chromatography, Dimethyl sulfoxide, Fats, Oils, Pesticide residues.
Abstract

15559-68
A SENSITIVE PROCEDURE FOR URINARY P-NITROPHENOL DETERMINATION AS A MEASURE OF EXPOSURE TO PARATHION.
J W Elliott K C Walker A E Penick W F Durham
J Agr Food Chem 8(2):111-113
Mar 1960 381 J8223
Dicapthon, Dinitrocresol, Humans, Insecticide residues, Parathion, Rats, Urine.

15560-68
RESIDUE STUDIES OF TOMATO FOLIAGE AND FRUITS FROM PLANTS RECEIVING PERC- "14 PRE-OR POST-EMERGENCE.
S C Fang E Fallin
Weeds 13(2):152-155, TARS.
Apr 1965 79.8 W41
Fruit, Herbicide residues, Leaves, Tomatoes.

15561-68
GAS CHROMATOGRAPHIC DETERMINATION OF RESIDUES OF ORGANOPHOSPHORUS PESTICIDES WITH A MODIFIED FLAME IONIZATION DETECTOR.
J H Ford M Reroza
Ass Offic Anal Chem J 50(3):601-604
Jun 1967 381 AS7
Chromatography, Ionization chambers, Organophosphorus compounds, Pesticide residnes.

15562-68
STUDY OF MODIFICATIONS OF THE MILLS PROCEDURE FOR CHLORINATED PESTICIDES IN DAIRY PRODUCTS.
W B Furman N V Fehringer
Ass Offic Anal Chem J 50(4):903-90R
Aug 1967 381 AS7
Aldrin, Chlorinated hydrocarbons, Dairy prodncts, Dieldrin, Beptachlor, Insecticide residues, Lindane, Milk fat.
Abstract:

15563-68
DDT REPORTEDLY DISCOVERED IN ANTARCTIC SEALS AND FISH.
J L George
Agr Chem 20(9)'59
Sep 1965 381 AG8
DDT, Pesticide residues, Wildlife.

15564-68
METABOLISM OF TOK HERBICIDE IN DAIRY COW.
W H Gutenmann D J Lisk
J Dairy Sci 50(9):1516-1518
Sep 1967 44.8 J822
Chromatography, Dairy cattle, Dichloro-4'-aminodiphenyl ether, 2,4-, Dichloro-4'-nitrodiphenyl ether, 2,4-, Berbicide residues, Metabolism.

15565-68
METHOD FOR RESIDUES OF ZYTRON, O-2,4-DICHLOROPHENYL O-METHYL ISOPROPYLPHOSPRORAMIDOTHIOATE, IN CHICKEN TISSUES AND EGGS.
M C Ivey H V Claborn R Brinkman
Ass Offic Anal Chem J 50(3):634-637
Jun 1967 381 AS7
Chickens, Chromatography, Eggs, Herbicide residnes, Zytron.
Abstract

15566-68
DETERMINATION OF LINURON AND ITS KNOWN AND/OR SUSPECTED METABOLITES IN CROP MATERIALS.
S E Katz
Ass Offic Anal Chem J 50(4):911-917
Aug 1967 381 AS7
Carrots, Chromatography, Corn, Crops, Digitaria, Herbicide residues, Linnron, Metaholism, Soyheans.
Abstract

15567-68
DEGRADATION OF CARBAMATE HERBICIDES IN SOIL.
D D Kaufman
J Agr Food Chem 15(4):582-591
381 J8223
Carbamates, Decomposition, Herbicide residues, Microorganisms, Soils.

55 15568-68

Abstract

15568-68
RAPID CLEANUP OF DAIRY PRODUCTS FOR ANALYSIS OF CHLORINATED INSECTICIDE RESIDUE BY ELECTRON CAPTURE GAS CHROMATOGRAPHY.
R E Langlois A R Stemp R J Liska
J Agr Food Chem 12(3):243-245
381 J8223
Chlorinated hydrocarbons, Chromatography, Dairy products, Ddt, Dieldrin, Endrin, Food contamination, Insecticide residues, Lindane.

15569-68
DETERMINATION OF DDT AND RELATED SUBSTANCES IN HUMAN FAT.
A M Mattson J T Spillane C Baker G W Pearce
Anal Chem 25(7):1065-1070, REF.
15 Jul 1953 381 J825A
Chlorinated hydrocarbons, Chromatography, Ddt, Humans, Insecticide residues, Spectroscopy.

15570-68
WACA DISCUSSIONS COVER 'SILENT SPRING'.
E J Meier
Agr Chem 17(11)'64-67, 166
Nov 1962 381 AG8
Industry, Labeling, Legislation, Pesticides.

15571-68
METABOLISM OF DDT AND SOME OTHER CHLORINATED ORGANIC COMPOUNDS BY AEROBACTER AEROGENES.
J L Mendel A K Klein J T Chen M S Walton
Ass Offic Anal Chem J 50(4):897-903
Aug 1967 381 AS7
Aerobacter aerogenes, Aldrin, Chlorinated hydrocarbons, Chromatography, Ddt, Dieldrin, Insecticide residues, Metabolism, Methoxychlor, Tde.
Abstract:
aerobacter aerogenes can convert o,p'- and p,p'-DDT to their respective compounds. the organism is apparently not the mediator for the conversion of o,p'-DDT to to p,p'-DDT in the rat. aldrin and dieldrin are not affected by this organism.

15572-68
SCREENING METROD FOR TRE DETECTION OF CHLORINATED HYDROCARBON PESTICIDE RESIDUES IN THE FAT OF MILK, CHEESE, AND BUTTER.
R P Moubry G R Myrdal H P Jensen
Ass Offic Anal Chem J 50(4):885-888
Aug 1967 381 AS7
Benzene hexachloride, Butter, Cheese, Chlorinated hydrocarbons, Chromatography, Ddt, Dieldrin, Insecticide residues, Milk fat.
Abstract

15573-68
LOSS OF CHLORINATED HYDROCARBON INSECTICIDES FROM SOIL SURFACE IN THE FIELD.
M S Mulla
J Econ Entomol 53(4)'650-655, TABS.
Aug 1960 421 J822
Aldrin, Chlorinated hydrocarbons, DDT, Endrin, Hippolates, Insecticide residues, Soils.

15574-68
CORRELATION OF THE EFFECTS OF PARATHION ON ERYTHROCYTE CHOLINESTERASE WITH SYMPTOMATOLOGY IN PIGS.
W T Oliver R S Funnell
Can Entomol 22(86):80-84, BIBL. 83-84
Jan 1961 421 C16
Cholinesterases, Erythrocytes, Parathion, Swine, Toxicology.

15575-68
SIMPLE ULTRASENSITIVE TEST FOR DETECTING PENICILLIN IN MILK.
J M A Palmer F V Kosikowski
J Dairy Sci 50(9):1390-1394 REF
Sep 1967 44.8 J822
Food contamination, Milk, Penicillin.
Abstract

15576-68
DETERMINATION OF ZECTRAN RESIDUES IN AERIAL FOREST SPRAYING.
G R Pieper R F Miskus
J Agr Food Chem 15(5):915-916
Sep 1967 381 J8223
Aerial spraying, Choristoneura fumiferana, Chromatography, Forests, Insecticide residues, Pseudotsuga menziesii, Wildlife food plants.

15577-68
ACETONITRILE DILUTION: A POSSIBLE SOURCE OF ERROR IN THE "RAPID METHOD FOR CHLORINATED PESTICIDE RESIDUES IN NONFATTY FOODS".
M L Porter J A Burke P F Bertuzzi
Ass Offic Anal Chem J 50(3):644-645
Jun 1967 381 AS7
Acetonitrile, Insecticide residues, Kale, Tde, Water.

15578-68
THE DETERMINATION OF PESTICIDES IN TISSUES WITH THE ELECTRON CAPTURE DETECTOR WITHOUT PRIOR CLEANUP.
J L Radomski V Fiserova-Bergerova
34(12):934-939
Dec 1965
Aldrin, Chromatography, Cleanup, Ddt, Dieldrin, Electron capture, Lindane.
Not in Nat. agr. libr.
in: Industrial Medicine and Surgery (see vol. and pp. above); at Libr. Cong., RC963 .A37.

15579-68
NOTE ON IDENTIFICATION OF AZINPHOSMETHYL IN HUMAN TISSUES. AND IN PIGS.
F Sa M E Da Silva
Ass Offic Anal Chem J 50(6):1258-1260
Dec 1967 381 AS7
Azinphosmethyl, Cattle, Pigs, Homicides, Humans, Pesticide residues, Poisoning, Portugal, Tissues.

15580-68
RAPID SCREENING METHOD FOR DDT IN MILK WITH GAS CHROMATOGRAPHY.
M L Schafer K A Rusch J E Campbell
J Dairy Sci 46(10):1025-1032, REF.
Oct 1963 44.8 J822
Chlorinated hydrocarbons, Ddt, Food contamination, Insecticide residues, Milk.
Abstract

15581-68
ESCAPE OF METHYL BROMIDE THROUGH WALLBOARDS.
P Simmons
J Sci Food Agr 12(4)'I-207-8
Apr 1961 382 SO12
Fiberboard, Methyl bromide.

15582-68
INVESTIGATIONS ON DURSBAN INSECTICIDE. METABOLISM OF O,O-DIETHYL O-3,5,6-TRICHLORO-2-PYRIDYL PHOSPHOROTHIOATE AND 3,5,6-TRICHLORO-2-PYRIDINOL IN PLANTS.
G N Smith R S Watson F S Fischer
J Agr Food Chem 15(5):870-877
Sep 1967 381 J8223
Absorption, Cranberries, Diethyl 03,5,6-trichloro-2-pyridyl phosphorothioate, 0,0-, Hydrogen-ion concentration, Insecticides, Plant metabolism, Radioactive tracers, Trichloro-2-pyridinol, 3,5,6-.
Abstract

15583-68
SIMULTANEOUS ELECTRON CAPTURE - MICROCOULOMETRIC DETECTION FOR QUALITATIVE AND QUANTITATIVE PESTICIDE ANALYSIS. (IN: GULF COAST SHELLFISH SANITATION RESEARCH CENTER. TECHNICAL MEMORANDUM (GCSSRC FY) 66 -2.).
R M Tyo
2 P. (MIMEOGRAPHED)
30 Nov 1965
Colorimetry, Electron capture, Food contamination, Insecticide residues, Shellfish.
Not in Nat. agr. libr.

15584-68
PPC (PLANT PEST CONTROL) MANUAL.
N.P.
0000
Manuals, Pesticide residues, Plant pest control.
Unpublished; not in Nat. agr. libr.; indexed from title only.

15585-68
NOTICE OF FILING OF PETITION FOR FOOD ADDITIVE OXYTETRACYCLINE.
Fed Regist 32(119):8825
21 Jun 1967 L1.451
Fish, Food additives, Food contamination, Oxytetracycline.

15586-68
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.
Fed Regist 32(119):8824-8825
21 Jun 1967 L1.451
Avocados, Cottonseed, Fungicides, Pesticide residues, Pineapples, Sugar beets.

15587-68
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.
Fed Regist 32(119):8824
21 Jun 1967 L1.451
Amiben, Field crops, Herbicide residues, Vegetables.

15588-68
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.
Fed Regist 32(118):8776
20 Jun 1967 L1.451
Citrus, Fungicides, Pesticide residues.

15589-68
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.
Fed Regist 32(114):8539
14 Jun 1967 L1.451
Herbicide residues, Lettuce.

15590-68
NOTICE OF WITHDRAWAL OF PETITION FOR FOOD ADDITIVES.
Fed Regist 32(119):8825
21 Jun 1967 L1.451
Agricultural products, Food additives, Lumber preservatives, Pentachlorophenol, Pesticide residues.
Use on wood in contact with raw agricultural products.

15591-68
DICAMBA AND ITS METABOLITE. NOTICE OF ESTABLISHMENT OF TEMPORARY TOLERANCE.
Fed Regist 32(114):8539
14 Jun 1967 L1.451
Dicamba, Herbicide residues, Metabolites, Sorghum.

15592-68
DDT. PROPOSED ESTABLISHMENT OF PESTICIDE AND FOOD ADDITIVE TOLERANCES.
Fed Regist 32(112)858379
10 Jun 1967 L1.451
Ddt, Food additives, Hops, Insecticide residues.

15593-68
FOOD AND FOOD PRODDCTS. TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. O-PHENYLPHENOL AND ITS SODIDM SALT.
Fed Regist 32(124):9159
28 Jun 1967 L1.451
Carrots, Food contamination, Peaches, Pesticide residues, Phenols, Plums, Sodium salts.

15594-68
FOOD ADDITIVES PERMITTED IN FOOD FOR HUMAN CONSUMPTION.
1,1-BIS(P-CHLOROPHENYL)-2,2,2-TRICHLOROETHANOL.
Fed Regist 32(112):8359-834D
10 Jun 1967 L1.451
Dicofol, Food additives, Food contamination, Insecticide residues, Tea.

15595-68
FOOD ADDITIVES PERMITTED IN FOOD FOR HUMAN CONSDMPTION.
ETHION.
Fed Regist 32(123):9066
27 Jun 1967 L1.451
Ethion, Food additives, Insecticide residues, Raisins, Tea.

15596-68
FOOD ADDITIVES PERMITTED IN FEED AND DRINKING WATER OF ANIMALS OR FOR THE TREATMENT OF FOOD-PRODUCING ANIMALS. FOOD ADDITIVES PERMITTED IN FOOD FOR HDMAN CONSUMPTION. THIABENDAZOLE.
Fed Regist 32(115):8587
15 Jun 1967 L1.451
Ascariasis, Feed additives, Food additives, Swine, Thiabendazole, Water.

15597-68
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.
Fed Regist 32(124):9178
28 Jun 1968 L1.451
Food contamination, Herbicide residues, Rice, Rice straw.

15598-68
TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICDLTDRAL COMMODITIES. PROCEDDRAL REGULATIONS. FEES. SPECIFIC TOLERANCES. GENERAL PROVISIONS.
Fed Regist 32(119):8815-8816
21 Jun 1967 L1.451
Agricultural products, Pesticide residues, Pesticides.

15599-68
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.
Fed Regist 32(123):9114
27 Jun 1967 L1.451
Apples, Food contamination, Insecticide residues.

15600-68
EXTRACTION OF THE WATER WITH HEXANE FOLLOWED BY DETECTION AND ASSAY DSING CHROMATOGRAPHS EQUIPPED WITH ELECTRON CAPTDRE AND MICRO-COULOMETER DETECTORS.
N.P. (TYPEWRITTEN)
1966
Chromatography, Colorimetry, Electron capture, Food analysis, Food contamination, Hexane.
Not in Nat. agr. libr.

156D1-68
SWEEP CO-DISTILLATION CLEANUP OF MILK FOR DETERMINATION OF ORGANOPHOSPHATE AND CHLORINATED HYDROCARBON PESTICIDES.
R R Watts R W Storherr
Ass Offic Anal Chem J 5D(3):581-585
Jun 1967 381 AS7
Chlorinated hydrocarbons, Chromatography, Insecticide residues, Milk, Organophosphorus compounds.
Abstract:
this paper presents a rapid extraction and "sweep co-distillation" cleanup method for ten organophosphate and seven chlorinated pesticides in milk samples.

60 15602-68

60 TOXICOLOGY

15602-68
MAMMALIAN DETOXIFICATION OF INSECTICIDES.
A A deYakimac A Akin J Gabagan
Agr Chem 19(7)'45,86-87, 4 TABS.
Jul 1964 361 AG8
Dimethoate, Mice, Parathion, Poisoning.

15603-68
LETHAL ENDRIN CONCENTRATION IN THE BLOOD OF GIZZARD SHAD.
W A Brungs D I Mount
J Fish Res Board Can 24(2):429-431
Feb 1967 442.9 C16J
Blood, Endrin, Fish, Fishkill, Insecticide residues.

15604-68
ACUTE LEAD POISONING IN SWINE. (FR)
J Cristea
Rec Med Vet 143(8):749-754, REF.
Aug 1967 41.8 R24
Lead, Poisoning, Swine.
Abstract

15605-68
CHEMICAL STRUCTURE AND STERILIZING ACTIVITY OF N,NO-ALKYLENEBIS-(1-AZIRIDINECARBOXAMIDES) IN SCREW-WORM FLIES.
M M Crystal
J Econ Entomol 60 (4)'1005-1007
15 Aug 1967 421 J822
Alkylenebis-(1-aziridinecarboxamides), N,NO-, Chemosterilants, Cochliomyia hominivorax, Sterilization, Toxicology.
Abstract

15606-68
HEXANE EXTRACTABLE CHLORINATED INSECTICIDES IN HUMAN BLOOD.
W E Dale A Curley C Cueto
Life Sci 5(1):47-54, REF.
Jan 1966 442.8 L62
Blood, Chlorinated hydrocarbons, Hexane, Humans.

15607-68
EFFECTS OF ISOMERS OF DDD ON THYROID AND ADRENAL FUNCTION IN RATS.
M J Fregly I W Waters J A Straw
Can J Physiol Pharmacol 46(1):59-66, REF.
Jan 1968 444.8 C16
Adrenal glands, Isomerism, Tde.

15608-68
THE TOXICITY OF AMINOTRIAZOLE TO DOMESTIC ANIMALS. (GE)
R J Hapke
Zentralb Veterinarmed Beihe A 14(5):469-486, REF.
Aug 1967 41.8 Z5
Amitrole, Livestock, Toxicity.

15609-68
TOXICOLOGIC EFFECTS OF A PHOSPHOROTHIOIC ACID INSECTICIDE IN SHEEP.
E T McCarty M Haufler C A McBeth
Amer Vet Med Ass J 152(3):279-281
01 Feb 1968 41.8 AM3
Insecticides, Laboratory animals, Phosphorothioic acid, Sheep, Toxicity.
Abstract:
no ill effects were caused in sheep after 187 consecutive doses of the phosphorothioic acid organophosphate, o,o,o',o'-tetramethyl o,o'-thiodi-p-phenylene phosphorothioate.

15610-68
TOXICOLOGIC EFFECTS OF A PHOSPHOROTHIOIC ACID INSECTICIDE IN CATTLE.
J S Palmer
Amer Vet Med Ass J 152(3):282-284
01 Feb 1968 41.8 AM3
Abnormalities, Cattle, Death, Insecticides, Phosphorothioic acid, Toxicity.
Abstract:
exposure to oral dosages for 12 months displayed signs of toxicosis in cattle and abnormalities and early deaths of 2 calves.

15611-68
DDT AND RELATED COMPOUNDS IN DOG FOOD AND CSMA MEDIA USED IN INSECT REARING.
G L Bolofson J L Bishop
J Econ Entomol 60 (4):1186-1187
15 Aug 1967 421 J822
Blattella germanica, Ddt, Dicofol, Dog foods, Food contamination, Insect rearing, Tde.

15612-68
LATE-SEASON CONTROL OF EUROPEAN ELM SCALE WITH RIDRIN TRUNK INJECTIONS.
H E Thompson
J Econ Entomol 60(6):1745-1746
Dec 1967 421 J822
Ridrin, Chemical control (insects), Forest insects, Gossyparia spuria, Systemic insecticides.

65 PLANT PHYSIOLOGY AND BIOCHEMISTRY

15613-68
PROSPHORUS FERTILIZATION AND THE PHYTOTOXICITY OF SIMAZINE.
R S Adams Jr
Weeds 13(2):113-116, TABS.
Apr 1965 79.8 W41
Fertilizers, Phosphorus, Simazine.

15614-68
VARYING THE EMS EFFECT ON BARLEY BY CHANGING THE VARIOUS TREATMENT AND POSTWASHING TEMPERATURES. (GE)
K Bender H Gaul
Radiat Bot 07 _4), 289-301 REF
Aug 1967 450 E11
Barley, Ethyl methanesulfonate.
English summary

15615-68
FACTORS IN LIMA BEAN AND HEMP SEED REQUIRED FOR OOSPORE FORMATION BY SPECIES OF PHYTOPHTHORA.
HARNISH, W N.
L A Berg V G Lilly
54(8):895
Aug 1964
Hemp, Lima beans, Oospores, Phytophthora.

15616-68
TWISTED TWIG OF APPLE.
E C Blodgett M D Aichele
Phytopathology 54(12):1432
Dec 1964 464.8 P56
Apples.

15617-68
VIRUS-LIKE PARTICLES OF A PRACTION OF A STATOLON, A MOULD PRODUCT.
L F Ellis W J Kleinschmidt
Nature 215(5101), 649-650 REF
05 Aug 1967 472 N21
Molds, Penicillium stoloniferum, Statolon, Viruses.

15618-6B
MECHANISMS OF VARIATIONS IN VERTICILLIUM ALBO-ATRUM.
C Fordyce Jr R J Green Jr
54(7):795-798, BIBL. 798
Jnl 1964
Mycology, Plant biochemistry, Verticillium albo-atrum.

15619-68
METABOLISM OF 2-CHLORO-4,5-DIMETHYLPHENYL N-METHYLCARBAMATE IN BEAN PLANTS.
A B Friedman A J Lemin
J Agr Food Chem 15(4):642-647
Jnl 1967 381 J8223
Beans, Carbon isotopes,
Chloro-4,5-dimethylphenyl N-methylcarbamate, 2-, Metabolites.
Abstract

15620-68
PREVENTION OF PHOTODYNAMIC KILLING OF FUNGAL CELLS BY CAROTENOIDS.
P D Golastrohm
Phytopathology 53(7)'746
Jul 1963 464.8 P56
Carotenoids, Fungi, Mycology, Photochemistry,
Plant metabolism, Plant protective devices.

15621-68
INDUCED POLYGENIC MUTATIONS IN HEXAPLOID WHEATS.
Jv Goud
Radiat Bot 07 _4), 321-331 REF
Aug 1967 450 E11
Ethyl methanesulfonate, Gamma rays, Mutations, Polyploidy,
Wheat.
Abstract included.

15622-68
TOXIC BEHAVIOR OF TWO ITACONIMIDES.
B K Grover
Phytopathology 54(8):894
Aug 1964 464.8 P56
Fungicides.

15623-68
ISOLATION OF PHYTOPHTHORA MEGASPERMA VAR- SOJAE IN SOIL DILUTION PLATES.
J H Haas
Phytopathology 54(8):894
Aug 1964 464.8 P56
Culture media, Phytophthora megasperma.

15624-68
ASSOCIATION OF POLYGALACTURONATE TRANS-ELIMINASE WITH SOUTHERN ANTHRACNOSE BUT NOT WITH SPRING BLACK STEM OR STEMPHYLIUM LEAF SPOT OF ALFALFA.
J G Hancock R L Millar
Phytopathology 54(8):894
Aug 1964 464.8 P56
Alfalfa, Leaf spot (alfalfa), Plant biochemistry,
Spring black stem (alfalfa).

15625-68
PYRIDINE NUCLEOTIDE-LINKED ENZYMATIC REDUCTION OF TRIOSE, PENTOSE, AND HEXOSE PHOSPHATES ASSOCIATED WITH RUST INFECTION.
J W Hendrix J M Daly A Livne
54(8):895
Aug 1964
Hexoses, Pentoses, Reductases, Rust (wheat).

15626-68
SALT INJURY TO TREES.
P W Holmes
Phytopathology 51(10):712-718, BIBL. 717-718
Sep 1961 464.8 P56
Sodium chloride, Tree injuries.

15627-68
METABOLISM IN VITRO OF PHLORIDZIN AND OTHER COMPOUNDS BY VENTURIA INAEQUALIS.
J Holowczak J Kuc E R Williams
Phytopathology 52(10):1019-1023, TABS.
Oct 1962 464.8 P56
Chemicals, Phlorizin, Plant metabolism, Plant physiology,
Venturia inaequalis.

15628-68
INHIBITION OF PLANT GROWTH BY HALOGENATED BENZOIC ACIDS.
C W Hoffman E M Godar D C Torgeson
J Agr Food Chem 15(6):976-981
Nov 1967 381 J8223
Beans, Plant growth inhibitors, Plant regulators, Tomatoes,
Triiodo benzoic acid, 2,3,5-.
Abstract

15629-68
PHENOTYPIC RESTORATION OF FERTILITY IN A MALE-STERILE MUTANT BY TREATMENT WITH GIBBERELLIC ACID.
J N R Kasembre
Nature 215(5101), 668
05 Aug 1967 472 N21
Barley, Breeding, Fertility, Gibberellic acid, Plant mutation,
Sterility.

15630-68
COLOR FORMATION ON PHENOL-CONTAINING MEDIA AS RELATED TO LIGNIN BREAKDOWN BY WOOD-ROTTING BASIDIOMYCETES.
T K Kirk A Kelman
Phytopathology 54(8):897-898
Aug 1964 464.8 P56
Culture media, Lignin, Phenol reaction, Wood destroying fungi.

15631-68
EFFECT OF MAJOR AND MINOR GENE INTERACTION ON ADAPTIVE PARASITISM IN PHYTOPHTHORA INFESTANS.
W A Kodgson
Phytopathology 55(1):73-75, BIBL.
Jan 1965 464.8 P56
Genes, Parasitism, Phytophthora, Potatoes.

15632-68
AN ADENOSINE TRIPHOSPHATE-BINDING SUBSTANCE FROM CERATOCYSTIS ULMI.
R H Kurtzman Jr
Phytopathology 54(11):1386-1388
Nov 1964 464.8 P56
Adenosine triphosphates, Dieback (elms).

15633-66
LIGHT ABSORPTION BY LIVING MYCELIA OF FUNGI BEFORE AND AFTER EXPOSURE TO NEAR-ULTRAVIOLET RADIATION.
C M Leach
Phytopathology 54(12):1434-1435
Dec 1964 464.6 P56
Fungi, Radiation.

15634-68
EFFECT OF CERTAIN FUNGI ON THE GROWTH OF DWARF TOMATOES IN GNOTOBIOTIC CONDITIONS.
D Lindsey
Phytopathology 54(8):899
Aug 1964 464.8 P56
Fungi, Tomatoes.

15635-68
DETECTION OF COMMON ANTIGENS OF APPLE VIRUS ISOLATES BY COMPLEMENT FIXATION.
E C McCrum
Phytopathology 54(8):900
Aug 1964 464.8 P56
Antigens, Complement fixation, Virus diseases (plants).

15636-68
TOLERANCES OF PICEA SPP TO A NEMATOCIDE.
P Miller
Agr Chem 20(12)'67
Dec 1965 381 AG8
Dibromo-3-chloropropane, 1,2-, Picea.

15637-68
CONSTITUENTS OF THE COTTON BUD. THE CARBONYL COMPOUNDS.
J P Minyard J H Tumlinson A C Thompson P A Redin
J Agr Food Chem 15(3):517-524
May 1967 381 J8223
Anthonomus grandis, Attractants, Carbonyl compounds, Cotton.
Abstract:
the Boll Weevil Research Laboratory is investigating cotton plant constituents to determine the nature of those which are attractants for the boll weevil, Anthonomous grandis.

15638-68
EFFECT OF CARBON SOURCE AND CALCIUM ON GROWTH OF PYTHIUM ULTIMUM.
L D Moore
Phytopathology 54(8):901
Aug 1964 464.6 P56
Calcium, Carbon, Pythium ultimum.

15639-68
PATHOLOGICAL ANATOMY OF SCLEROTINIA TRIFOLIORUM ON CLOVER AND ALFALFA.
G D Prior J H Owen
Phytopathology 54(7):784-787
Jul 1964 464.8 P56
Alfalfa, Anatomy, Clover.

15640-68
CONTROL OF PATHOGENIC FUNGI, NEMATODES, AND WEEDS BY PREPLANTING CHEMICAL TREATMENTS.
R W Rankin
Phytopathology 51(9):644-645
Sep 1961 464.8 P56
Fungi, Plant nematodes, Weeds.

15641-68
ACCUMULATION OF COPPER BY SOME ZAMBIAN PLANTS.
C Reilly
Nature 215(5101), 667-668
05 Aug 1967 472 N21
Copper, Plants.

15642-68
ANALYSIS OF PROTEINS AND ENZYMES OF THE INTERACTION BETWEEN PHASEOLUS VULGARIS AND PSEUDOMONAS PHASEOLICOLA (HALO BLIGHT OF BEANS).
K Rudolph
Phytopathology 54(8):904-905
Aug 1964 464.8 P56
Enzymes, Halo blight (beans), Plant biochemistry, Pseudomonas phaseolicola.

15643-68
EFFECTS OF X-IRRADIATION OF SEED ON X-1 AND X-2 GENERATIONS IN PINUS BANKSIANA LAMBERT.
Td Rudolph
Radiat Bot 07 _4), 303-312 REF
Aug 1967 450 R11

Pinus banksiana, X-rays.
Abstract included.

15644-68
NUCLEAR CONDITION AND DIVISION IN VEGETATIVE HYPHAE OF RHIZOCTONIA SOLANI.
M N Shatla J B Sinclair
Phytopathology 54(8):907
Aug 1964 464.8 P56
Cell nucleus, Cytology, Mitosis, Rhizoctonia solani.

15645-68
PECTIN TRANS-ELIMINASE AND POLYGALACTURONASE PRODUCTION BY RHIZOCTONIA SOLANI AND OTHER FUNGI.
R T Sherwood
Phytopathology 54(8):907
Aug 1964 464.8 P56
Fungi, Mycology, Pectinase, Pectins, Rhizoctonia solani.

15646-68
EFFECTS OF CHLOROPHENOXY HERBICIDES ON SOYBEANS.
R J Smith Jr
Weeds 13(2):168-169
Apr 1965 79.8 W41
Herbicides, Soybeans.

15647-68
EFFECTS OF SURFACTANTS ON FUNGI.
G W Steiner
Phytopathology 54(8):909
Aug 1964 464.8 P56
Fungi, Fungicides, Surface-active agents.

15648-68
FORMATION OF THE BASIDIAL STAGE OF SOME ISOLATES OF RHIZOCTONIA.
R M Stretton A R McKenzie K P Baker N T Flentje
Phytopathology 54(9):1093-1095
Sep 1964 464.8 P56
Mycology, Rhizoctonia.

15649-68
FIXATION OF HC14N BY FUNGI.
G A Strobel
Phytopathology 54(8):909
Aug 1964 464.8 P56
Fungi, Plant biochemistry.

15650-68
PROTEIN AND ISOZYME PATTERNS OF SWEET POTATOES AS RELATED TO ACQUIRED IMMUNITY.
D J Weber M A Stahmann
Phytopathology 54(8):911-912
Aug 1964 464.8 P56
Immunochemistry, Plant biochemistry, Proteins, Sweetpotatoes.

15651-68
PERMEABILITY CHANGES CAUSED BY VICTORIN.
R Wheeler
Phytopathology 51(9):646
Sep 1961 464.8 P56
Permeability, Victorin.

15652-68
PROPERTIES OF PURIFIED ACID PHOSPHATASES FROM HEALTHY AND RUST-INFECTED BEAN LEAVES.
P H Williams R C Staples
Phytopathology 54(7):749
Jnl 1964 464.8 P56
Acid phosphatase, Beans, Fungus diseases (plants), Leaves, Phosphatases, Plant biochemistry, Rust (beans).

15653-68
RESPIRATION, PHOTOSYNTHESIS, AND DARK FIXATION OF C1402 BY HEALTHY AND RUSTED BEAN LEAVES.
A I Zaki C J Mirocha
Phytopathology 54(8):913
Aug 1964 464.8 P56
Beans, Leaves, Photosynthesis, Plant respiration, Rust (beans).

15654-68
RATES OF PHENOLIC SYNTHESIS IN POTATO ROOTS RESISTANT AND SUSCEPTIBLE TO VERTICILLUM ALBO-ATRUM.
PATIL, S S.
M Zucker A E Dimond
Phytopathology 54(8):903
Aug 1964 464.8 P56
Plant disease resistance, Potatoes, Roots, Verticillium albo-atrum.

70 CHEMISTRY

15655-68
EFFECT OF CHLORAMPHENICOL ON THE CONCENTRATIONS OF FREE AMINO ACIDS AND AMIDES IN HEALTHY AND CUCUMBER MOSAIC VIRUS (CMV- Y) INFECTED PLANTS.
O P Sehgal
Phytopathology 54(8):907
Aug 1964 464.8 P56
Amides, Amino acids, Chloramphenicol, Mosaic (cucumbers), Plant biochemistry.

15656-68
SELECTIVE RESIDUE DETERMINATION OF SULFUR-, HALOGEN-, AND PHOSPHORUS-CONTAINING PESTICIDES BY HELIUM-PLASMA EMISSION SPECTROMETRY.
C A Bache D J Lisk
Ass Offic Anal Chem J 50(6):1246-1250
Dec 1967 381 AS7
Chromatography, Drugs, Pesticide analysis, Pesticide residues, Spectrometry.
Abstract

15657-68
INFRARED ABSORPTION SPECTRA AND POLYMERIC STRUCTURES OF THREE s-TRIAZINE HERBICIDES AND THEIR METABOLITES.
J-Y T Chen
Ass Offic Anal Chem J 50(3):595-600
Jun 1967 381 AS7
Herbicides, Infrared spectra, Metabolites, Polymers, S-triazines.
Abstract

15658-6R
ANALYSIS OF DURSBAN IN LIVESTOCK DIPS AND SPRAYS.
F P Czech
Ass Offic Anal Chem J 5U(4):861-868
Aug 1967 3R1 AS7
Acaricides, Dipping, Dursban, Formulations, Infrared photography, Insecticides, Livestock, Spectrophotometry, Spraying, Ultraviolet rays.
Abstract:

15659-6R
THE RELATION BETWEEN THE COMPOSITION OF PAROTID SALIVA AND MIXED SALIVA IN SHEEP DURING THE INDUCTION OF SODIUM DEFICIENCY.
A Dobson R N R Kay I McDonald
Res Vet Sci 1(2):103-11U, TARS.
Apr 196U 41.R R312
Parotid gland, Saliva, Sheep, Sodium.

15660-68
USE OF CHROMATOGRAPHY FOR SELECTING SYSTEMIC QUATERNARY AMMONIUM FUNGICIDES.
L V Edgington
Phytopathology 54(8):892
Aug 1964 464.R P56
Fungicides, Quaternary ammonium compounds.

15661-6R
THIN LAYER CHROMATOGRAPHY OF SOME CARBAMATE AND PHENYLUREA PESTICIDES.
J M Finocchiaro W R Benson
Ass Offic Anal Chem J 50(4):R88-896
Aug 1967 3R1 AS7
Carbamates, Chromatography, Herbicide residues, Insecticide residues.
Abstract

15662-6R
FACTORS AFFECTING THE VAPOR LOSS OF EPTC FROM SOILS.
R A Gray A J Weierich
Weeds 13(2):141-147, TARS.
Apr 1965 79.8 W41
Herbicide residnes, Soil chemistry, Soils, Vapors.

15663-68
PESTICIDES' UNSUNG ASSISTANTS.
J W Hammond
Agr Chem 22(7):22-24
Jnl 1967 381 AG8
Ddt, Formulations, Insecticides, Malathion, Mineral oil, Solvents, Toxaphene.

15664-6R
A MECHANISM FOR CONTINUOUS PRODUCTION OF HYDROGEN SULFIDE IN SOILS SUBMERGED IN WATER.
R R Kabana J W Jordan
Phytopathology 54(8):897
Aug 1964 464.8 P56

70 15665-68

Hydrogen sulfide, Soil air, Soil chemistry.

15665-68
SEMI-AUTOMATIC EXTRACTION OF ORGANIC MATERIALS FROM WATER.
PUBLIC HEALTH SERVICE WATER POLLUTION SURVEILLANCE
SYSTEM APPLICATIONS AND DEVELOPMENT REPORT 16.
F K Kawahara J W Eichelberger B H Reid H Stierli
10 P. (MIMEOGRAPHED)
Nov 1965
Aldrin, Chlorinated hydrocarbons, Dieldrin, Endrin, Equipment,
Insecticide residues, Water pollution.
Not in Nat. agr. libr.

15666-68
VERTICILLATE ACTINOMYCETES, PRODUCERS OF POLYENIC ANTIBIOTICS.
Yu E Konev V A Tsyganov
Microbiology 35 (4), 516-525 REF
Jnl 1966 448.3 M582AE
Actinomycetes cinnamomeus, Actinomycetes hachijoensis,
Antibiotics.

15667-68
ACTION AND EFFECTIVENESS OF CERTAIN CLASSES OF HERBICIDES.
O A Leonard
10(10):6,8,10. (CONCL.)
Oct 1967
Amitrole, Dalapon, Dicamba, Dinitrobutylphenol, Diquat,
Fenuron, Herbicides,
Methyl-4-chlorophenoxy)butyric acid, 4-(2-, Monuron, Paraquat,
Pentachlorophenol, Picloram, Plant regulators,
Sodium arsenite, Spraying, Toxicology,
Trichlorobenzoic acid, 2,3,6-.

15668-68
WANTED' AN IMAGE FOR AN INDUSTRY.
L G Mock Jr
Agr Chem 17(11)'105-109
Nov 1962 381 AG8
Agricultural chemicals, Public health.

15669-68
MOVEMENT OF NONVOLATILE, DIFFUSIBLE FUNGICIDES THROUGH COLUMNS OF SOIL.
D E Munnecke
Phytopathology 51(9):593-599, TABS.
Sep 1961 464.8 P56
Fungicides, Soils.

15670-68
HERBICIDAL METHOD UTILIZING GLYCOL ESTERS OF
2,3,6-TRICHLOROPHENYLACETIC ACID AS HERBICIDES.
PATENT 3,325,273.
J S Newcomer E D Weil E Dorfman
Us Patent Office Offic Gaz 839(2):676
13 Jun 1967 156.65 OF2
Herbicides, Patents,
Trichloropheuylacetic acid, 2,3,6-, glycol esters.

15671-68
ANTIBIOTIC STREPTOGAN AND PROCESS FOR PREPARATION.
PATENT 3,334,015.
B Schmitz
Us Patent Office Offic Gaz 841(1):238
01 Aug 1967 156.65 OF2
Antibiotics, Patents, Sarcoma, Streptogan,
Streptomyces streptoganensis.

15672-68
STUDIES ON RETICULO-RUMEN SODIUM AND POTASSIUM
CONCENTRATIONS AND ELECTRICAL POTENTIALS IN SHEEP.
A F Sellers A Dobson
Res Vet Sci 1(2):95-102 TABS.
Apr 1960 41.8 R312
Potassium, Reticulum, Sheep, Sodium.

15673-68
ISOLATION AND CHARACTERISATION OF MALPORMIN.
N Takahashi R W Curtis
J Sci Food Agr 12(6)'I-270-2
Jun 1961 382 SO12
Aspergillus, Peptides.

15674-68
ELECTRON CAPTURE GAS CHROMATOGRAPHY.
12 P. (MIMEOGRAPHED)
1967
Chromatography, Humans, Pesticide residues.
Not in nat. agr. lib.

15675-68
TIFUNGAL COMPOSITIONS AND METHODS FOR THEIR USE.
PATENT 3,370,957.
J R Wagner T W Humphreys H H Boyse
Us Patent Office Offic Gaz 847(4):1102
27 Feb 1968 156.65 OF2
Fungicides, Patents, Thiazolylbenzimidazoles, 2-.

15676-68
SOME BIOCHEMICAL EFFECTS OF ALKYLATING AGENTS.
G P Wheeler
Fed Amer Soc Exp Biol Fed Proc 26(3):885-892 REF
May 1967 442.9 F31P
Alkylation, Biochemistry, Cells, Culture media, Enzymes,
Neoplasms, Nitrogen mustards, Proteins.

15677-68
PLASMA ENZYME LEVELS IN CHICKENS, A MEASURE OF DRUG INDUCED PATHOLOGY.
A Zarkower R L Crute Orono University Of Maine
Avian Dis 4(4):402-413, BIBL. 411-413, TABS.
Nov 1960 41.8 AV5
Animal diseases, Blood plasma, Chickens, Drugs, Enzymes.

15678-68
TRANSAMINASES AND DEHYDROGENASES IN CHICKEN PLASMA.
L S McDaniel H L Chute
Avian Dis 3(4):407-411
Nov 1959 41.8 AV5
Aminotransferases, Blood plasma, Chickens, Dehydrogenases.

80 ENGINEERING

15679-68
AN INEXPENSIVE AND EFFECTIVE INDOOR INSECTARY.
J M Brennan W A Maki
J Econ Entomol 53(4):685-688
Aug 1960 421 J822
Breeding, Insect cages.

15680-68
TISSUE CULTURE AND CHICKEN EMBRYO TECHNIQUES FOR INFECTIOUS LARYNGOTRACHEITIS VIRUS STUDIES.
T W Chomiak R E Luginbuhl C F Helmboldt
Avian Dis 4(3):235-246, PLS.
May 1960 41.8 AV5
Chickens, Infectious laryngotracheitis virus, Virology.

15681-68
TECHNIQUE FOR GERMINATING UREDOSPORES OF PUCCINIA STRIIFORMIS.
R G Enge
Phytopathology 50(7):745-746
Jul 1963 464.8 P56
Culture media, Puccinia, Seed germination, Uredospores.

15682-68
DEMONSTRATION OF ANAPLASMA MARGINALE WITH THE FLUORESCENT DYE, ACRIDINE ORANGE; COMPARISONS WITH THE COMPLEMENT-FIXATION TEST AND WRIGHT'S STAIN.
J H Gainer
Amer J Vet Res 22(90):882-886
Sep 1961 41.8 AM3A
Acridine orange.

15683-68
A SMALL SELF-PROPELLED SPRAYER FOR AGRICULTURAL RESEARCH.
W G Genung E D Harris Jr
Fla Entomol 42(4):169-174, 4 REFS., 2 TABS.
Dec 1959 420 F662
Agricultural research, Spraying equipment.

15684-68
A VAPOR TRAPPING APPARATUS FOR DETERMINING THE LOSS OF EPTC AND OTHER HERBICIDES FROM SOILS.
R A Gray
Weeds 13(2):138-141, TABS.
Apr 1965 79.8 W41
Equipment, Herbicide residues, Herbicides, Soils, Vapors.

15685-68
THE CDC SWEEPER, A SIX VOLT MECHANICAL ASPIRATOR FOR COLLECTING ADULT MOSQUITOES. (ABSTRACT).
B O Hayes G E Kitaguchi R M Mann
Calif Mosquito Contr Ass Proc Rep 35:121
1967 428 C763
Culicidae, Insect collecting equipment.

15686-68
A NEW BLEACHING TECHNIQUE WITH POSSIBLE GENERAL USE IN ENTOMOLOGY.
C L Judson
Entomol Soc Amer Ann 56(3):407-408, 5 REFS.
May 1963 420 EN82
Decolorizing, Insect eggs.

15687-68
THE USE OF AGAR PLATES AS AN AID FOR THE ISOLATION OF LEPTOSPIRES.
E E Roth D Linder W V Adams
Amer J Vet Res 22(87):308-312
Mar 1961 41.8 AM3A

15688-68
A CONSTANT TEMPERATURE BATH FOR POT-GROWN PLANTS.
A E Steele
Plant Dis Rep 51(3):171-173
Mar 1967 1.9 P69P
Baths, Greenhouse culture, Thermostats, Tomatoes.

15689-68
A WIDE-RANGE VARIABLE TEMPERATURE CABINET FOR BIO-ECOLOGICAL STUDIES.
E B White P DeBach
J Econ Entomol 53(6):1030-1034, 6 REFS.
Dec 1960 421 J822
Aphelinidae, Chalcidoidea, Hymenoptera, Insect biology, Insect ecology.

15690-68
A VENTILATION UNIT FOR AERATING INSECTARY SLEEVE CAGES.
G L Finney
J Econ Entomol 53(5):959-960, 1 REF.
Oct 1960 421 J822
Air flow, Insect cages, Ventilation.

15691-68
A CARDIAC BLEEDING TECHNIQUE FOR SMALL BIRDS.
D C O'Meara
Avian Dis 4(3):230-231
May 1960 41.8 AV5
Birds, Blood, Heart.

90 INDUSTRY

15692-68
FARM CHEMICALS HANDBOOK. 1968 ED.
VAR. PP. MEISTER PUBLISHING CO., WILLOUGHBY, OHIO
1968
Handbooks, Pesticides.

Economics

15693-68
INDIA CAN FEED ITSELF.
G Andreasen
Agr Chem 20(9):31-32,170
Sep 1965 381 AG8
Agricultural efficiency, Agricultural outlook, Agricultural policies, India.

15694-68
OPPORTUNITIES AND CHALLENGES ARE AHEAD FOR FERTILIZER INDUSTRY.
K Constant
Agr Chem 20(2):36-41
Feb 1965 381 AG8
Advertising, Farmers, Fertilizers, Industry, Marketing.

Regulations

15695-68
PESTICIDE SAFETY AND USE IN EUROPE.
J de Bruin
Agr Chem 22(10):26,30-31
Oct 1967 361 AG8
Europe, Foreign trade, Pesticides.

15696-68
STANDARDIZATION OF BACILLUS THURINGIENSIS PRODUCTS.
HCMOLCGY OF STANDARD.
H D Burges
Nature 215(5101), 664-665
05 Aug 1967 472 N21
Biological control (insects), Standardization, Thuricide.

15697-68
LIABILITY FOR MISUSE OF PESTICIDES.
J L Dye
Agr Chem 20(9):71-72
Sep 1965 381 AG8
Pesticides.

ABNORMALITIES
Factors producing embryonic and fetal abnormalities, death, and abortion in swine. excerpts from the Symposium on Factors Producing Embryonic and Fetal Abnormalities, Death, and Abortion in Swine, sponsored by the National Academy of Science, U.S. livestock Sanitary Association, and Agricultural research service, U.S. department of agriculture. october 2-3, 1967, Chicago, Illinois. 15485

Toxicologic effects of a phosphorothioic acid insecticide in cattle. 15610

ABORTION
Factors producing embryonic and fetal abnormalities, death, and abortion in swine. excerpts from the Symposium on Factors Producing Embryonic and Fetal Abnormalities, Death, and Abortion in Swine, sponsored by the National Academy of Science, U.S. livestock Sanitary Association, and Agricultural research service, U.S. department of agriculture. october 2-3, 1967, Chicago, Illinois. 15485

ABSORPTION
Investigations on Dursban insecticide. metabolism of O,O-diethyl O-3,5,6-trichloro-2-pyridyl phosphorothioate and 3,5,6-trichloro-2-pyridinol in plants. 15582

ACARAPIS
The susceptibility of honey bees of different ages to infestation by Acarapis woodi (Rennie). 14905

ACARIASIS
Experimentally induced bovine psoroptic acariasis in a rabbit. 15407

ACARICIDES
Three plans for using acaricides to control mites on apple. 15223

Acaricida tests on the biarra strain of organophosphorus resistant cattle tick Boophilus microplus from southern Queensland. 15506

Analysis of Dursban in livestock dips and sprays. 15658

ACARINA
Life-history studies of Amblyseius limonicus, with comparative observations on Amblyseius bibisci (Acarina: Phytoseiidae). 14832

The ixodid ticks of Tanzania. a study of the zoogeography of the Ixodidae of an east African country. gL458.a2Y2. 14848

ACER
Physiological factors in the etiology and alleviation of salt-induced decline of roadside maples and pines. 15102

ACETONITRILE
Extraction of chlorinated pesticide residues from nonfatty samples of low moisture content. 15550

Acetonitrile dilution: a possible source of error in the "rapid method for chlorinated pesticide residues in nonfatty foods". 15577

ACETYLCHOLINE
The occurrence of acetylcholine in the nervous tissues of American cockroaches. 14874

ACETYLCHOLINESTERASES
Inhibition of housefly acetylcholinesterase by carbamates. 14891

ACRETA
Effects of carbon dioxide anesthesia on the house cricket, Acheta domesticus (Orthoptera: Gryllidae). 14932

ACID PHOSPHATASE
Properties of purified acid phosphatases from healthy and rust-infected bean leaves. 15652

ACIDS
The etiology of legume bloat-nonvolatile acids. 15457

ACRIDIDAE
Changes in haemolymph lipoproteins during locust flight. 14914

ACRIDINE ORANGE
Demonstration of Anaplasma marginale with the fluorescent dye, acridine orange; comparisons with the complement-fixation test and Wright's stain. 15682

ACTINOMYCETES CINNAMONEUS
Verticillate factinomycetes, producers of polyenic antibiotics. 15666

ACTINOMYCETES HACHIJOENSIS
Verticillate factinomycetes, producers of polyenic antibiotics. 15666

ACYRTHOSIPHON
Boll weevil survival in Carolinas higher than in 1961. 15231

ACYRTHOSIPHON PISUM
Propagation of braconid parasites of the pea aphid. 14887

ADENOCARCINOMA
Enzootic nasal adenocarcinoma in sheep. 15357

ADENOSINE TRIPHOSPHATES
In vitro increase in virus infectivity. ii. 15221

An adenosine triphosphate-binding substance from Ceratocystis ulmi. 15632

ADRENAL GLANDS
Effects of isomers of DDD on thyroid and adrenal function in rats. 15607

ADVERTISING
Opportunities and challenges are ahead for fertilizer industry. 15694

AEDES
Sampling studies with Aedes vexans and some other Wisconsin Aedes (Diptera: Culicidae). 14813

Aedes (Verrallina) of the Papuan subregion (Diptera: Culicidae). 14825

The effects of photoperiod and temperature on the induction of diapause in Aedes triseriatus (Say). 14900

Laboratory observations of aedine mosquito oviposition (Diptera, Culicidae, Aedes). 14976

Panel: opposing philosophies in mosquito control technology: emphasis on control of adult mosquitoes in Florida. 14980

AEDES AEGYPTI
Chemicals tested as space repellents for yellow-fever mosquitoes. ii. carbanilates, benzamides, aliphatic amides, and imides. 14915

Susceptibility of mosquitoes to silica gel insecticides. 14920

Sperm depletion in chemosterilized and normal males of the yellow fever mosquito, Aedes aegypti. 14972

The influence of sublethal dosages of insecticides on the basal follicles of Aedes aegypti (L.). (abstract). 14986

Evaluation of thermal and nonthermal fogs against four species of mosquitoes. (abstract). 14987

AEDES NIGROMACULIS
Cross-tolerance of California Aedes nigromaculis (Ludlow) larvae to EPN, Abate, and Dursban. (abstract). 14973

Biological activity of surfactants and some chemical intermediates against pre-imaginal mosquitoes. 14979

AEDES SOLLICITANS
Preliminary observations on the incidence and biology of a mermithid nematode of Aedes sollicitans in Louisiana. (abstract). 14933

AEDES TAENIORHYNCHUS
New methods of introducing visual and auditory cues. (abstract). 14974

Evaluation of thermal and nonthermal fogs against four species of mosquitoes. (abstract). 14987

AERIAL DUSTING

AERIAL DUSTING
Attraction of melon flies to lures on foliage or cane fibers at various heights. 14890

AERIAL PLANT DISEASE CONTROL
Effect of volume and variation in droplet size of spray applications from an air-carrier sprayer on control of three almond diseases. 15147

AERIAL SPRAYING
Determination of Zectran residues in aerial forest spraying. 15576

AEROBACTER AEROGENES
Metabolism of dDT and some other chlorinated organic compounds by Aerobacter aerogenes. 15571

AEROSOLS
The effectiveness of liquefied-gas-propelled concentrated allethrin aerosols and air-atomized dibrom aerosols against normal and resistant house flies. 14984

AFLATOXIN
A semi-quantitative determination of aflatoxin B in groundnut meal, groundnuts and peanut butter. 15292

AFRICAN HORSE SICKNESS
A preliminary note on the use of an inactivated vaccine against equine pest. 15329

Experimental trasmission of African horse-sickness by means of mosquitoes. 15424

AFRICAN HORSE SICKNESS VIRUS
Buoyant density of African horsesickness virus. 15458

AFRICAN SWINE FEVER VIRUS
Synthesis and cytopathogenesis of African swine fever virus in porcine cell cultures. 15416

AGALLIA
The transovarial transmission of wound-tumor virus. 15179

AGAR
Immune response to a plant virus bound or serologically precipitated in agar. 14999

Detection and identification of salmonella from dried whole egg, dried egg yolk, and dried egg white: report of a collaborative study. 15537

AGGLUTINATION TEST
Non-specific plate agglutination reactions with PPLO antigen. 15331

AGRICULTURAL CHEMICALS
Wanted' An image for an industry. 15668

AGRICULTURAL EFFICIENCY
India can feed itself. 15693

AGRICULTURAL OUTLOOK
India can feed itself. 15693

AGRICULTURAL POLICIES
India can feed itself. 15693

AGRICULTURAL PRODUCTS
Notice of withdrawal of petition for food additives. 15590

Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. procedural regulations. fees. specific tolerances. general provisions. 15598

AGRICULTURAL RESEARCH
A small self-propelled sprayer for agricultural research. 15683

AGROMYZIDAE
Parasites and predators associated with five species of leaf-mining insects in black locust. 14814

AIR FLOW
A ventilation unit for aerating insectary sleeve cages. 15690

AIR POLLUTION
Characterization of the plant damage problem by air pollutants in New Jersey. 15538

AIR SACS
The histopathologic characteristics of diseases producine inflamation of the air sacs in turkeys-a comparative study. 15324

ALBINISM
Albino Peridermium harknessii in ponderosa pine. 15153

ALDRIN
Soil treatments with insecticides for control of the eye gnats Hippelates collusor and H. hermsi. 14977

Insecticidal control of paedogenetic cecid larvae in mushroom beds. I. incorporation of insecticides into coonpost. II. incorporation of insecticides in the casing layer. 15241

Study of modifications of the Mills procednre for chlorinated pesticides in dairy products. 15562

Metabolism of dDT and some other chlorinated organic compounds by Aerobacter aerogenes. 15571

Loss of chlorinated hydrocarbon insecticides from soil surface in the field. 15573

The determination of pesticides in tissnes with the electron captnre detector without prior cleannp. 15578

Semi-automatic extraction of organic materials from water. public Health Service Water Pollution Snrveillance System Applications and Development Report 16. 15665

ALEOCHARA
Effect of soil treatments of heptachlor and parathion on predators and parasites of root maggots attacking rntabagas on Prince Edward Island. 15249

ALFALFA
Rearing of three spotted alfalfa aphid Hymenopterus parasites for mass release. 14878

Propagation of braconid parasites of the pea aphid. 14887

Crown and root rots of alfalfa and red clover and the relative prevalence of associated fungi. 15007

Alfalfa mosaic virns transmitted through alfalfa seed. 15055

Fungi isolated from black stem of alfalfa and the inflnence of temperature on lesion formation and disease severity. 15160

The transovarial transmission of wound-tumor virns. 15179

Spotted alfalfa aphid spreads. 15236

Association of polygalacturonate trans-eliminase with southern anthracnose hut not with spring black stem or Stemphylium leaf spot of alfalfa. 15624

Pathological anatomy of Sclerotinia trifoliornm on clover and alfalfa. 15639

ALKALINE PHOSPHOMONOESTERASE
Alkaline phosphomonoesterase activity in insects. 2.Activity in various cell fractions from the blow fly Phormia regina. 14892

ALKALOIDS
Steroid alkaloids in the disease resistance of white potato tuhers. 14995

ALKYLATION
Some hiochemical effects of alkylating agents. 15676

ALKYLENEBIS-(1-AZIRIDINECARBOXAMIDES), N,NO-
Chemical strncture and sterilizing activity of N,NO-alkylenebis-(1-aziridinecarboxamides) in screw-worm flies. 15605

ALLETHRIN
Studies on fine-particle, coarse-particle, and concentrated aerosols. 14948

The effectiveness of liguefied-gas-propelled concentrated allethrin aerosols and air-atomized dibrom aerosols against

normal and resistant horse flies. 14984

ALMONDS
Hull rot disease of almonds. 15135

Effect of volume and variation in droplet size of spray applications from an air-carrier sprayer on control of three almond diseases. 15147

ALPHITOBIUS
Leukosis - Transmission by beetles. 15311

ALTERNARIA MACROSPORA
Alternaria of cotton in Somalia. 15061

ALUMINUM
Repellancy of reflective aluminum to transient aphid viral vectors. 15189

ALUMINUM HYDROXIDE
Studies on pasteurellosis. IV. killed fowl cholera vaccine absorbed on aluminum hydroxide. 15381

AMAUROPIDIUS
Soil fauna research in the forest of Maures (Var). the dale of Fournel (Coleoptera). 14822

AMBLYOMMA
Field tests with insecticides for control of lone star ticks on cattle. 15502

AMBLYSEIUS
Life-history studies of Amblyseius limonicus, with comparative observations on Amblyseius hibisci (Acarina' Phytoseiidae). 14832

AMBLYSEIUS HIBISCI
Biotic potential of phytoseiid mites fed on virus-infected citrus red mites. 14950

AMBLYSEIUS LIMONICUS
Biotic potential of phytoseiid mites fed on virus-infected citrus red mites. 14950

AMBROSIA
An obstacle course in ragweed control. 15281

AMERICAN FOULBROOD
Resistance to American foul brood in honeybees. iII. differential survival of the two kinds of larvae from two-drone matings. 14971

AMIBEN
Notice of filing of petition regarding pesticides. 15587

AMIDES
Effect of chloramphenicol on the concentrations of free amino acids and amides in healthy and cucumber mosaic virus (CMV- Y) infected plants. 15655

AMINO ACIDS
The effect of chlorinated C3 hydrocarbons on growth and amino acid production of indigenous soil bacteria. 15000

The amino acid and sugar compositions of healthy and anthracnose-infected watermelons. 15125

Effect of chloramphenicol on the concentrations of free amino acids and amides in healthy and cucumber mosaic virus (CMV- Y) infected plants. 15655

AMINOTRANSFERASES
Some observations on field cases of facial eczema: liver pathology and determination of serum bilirubin, cholesterol, transaminase and alkaline phosphatase. 15354

Transaminases and dehydrogenases in chicken plasma. 15678

AMITROLE
Riboflavin-mediated photodecompsition of amitrole in relation to chlorosis. 15277

The toxicity of aminotriazole to domestic animals. 15608

Action and effectiveness of certain classes of herbicides. 15667

AMMONIA
A preliminary report on a potential new mosquito control weapon. 14982

Dry root rot of citrus induced by ammonia excesses. 14998

Ammonia injury to apples and peaches in storage. 15522

AMMONIAM FLOURIDE
Colonization of shortleaf pine stumps. 14990

AMMONIUM FLUOSILICATE
Control of the snake mite (Ophionyssus natricis), other mites, and certain insects with the sorptive dust, SG 67. 15507

AMMONIUM SULFAMATE
Colonization of shortleaf pine stumps. 14990

AMPHIMALLON
Correlation of European chafer development with the flowering period of common plants. 14818

ANAEROBIC BACTERIA
Isolation of an anaerobic vibrio from a king penguin (Aptenodytes longirostris). 15368

ANAPLASMOSIS
Erythrocyte survival in experimental anaplasmosis. 15319

Studies in anaplasmosis. IV. Development of the causative agent in deer erythrocytes transfused into calves. 15398

Studies in anaplasmosis. III. An autoantibody and symptomatic macrocytic anemia. 15453

ANASTREPHA LUDENS
Dispersal and migration of tepa-sterilized Mexican fruit flies. 14842

Sexing of Mexican fruit flies. 14946

ANATOMY
Pathological anatomy of Sclerotinia trifoliorum on clover and alfalfa. 15639

ANCYLOSTOMIASIS
A quantitative measurement of the blood loss caused by ancylostomiasis in dogs. 15341

ANEMIA
Studies in anaplasmosis. III. An antoantibody and symptomatic macrocytic anemia. 15453

ANESTHESIA
Effects of carbon dioxide anesthesia on the house cricket, Acheta domesticus (Orthoptera: Gryllidae). 14932

ANEURYSMS
Effect of diet on aortic ruptures in turkeys induced by diethylstilbestrol. 15304

ANIMAL ABNORMALITIES
Spontaneous abnormal cardiac arrhythmias and conduction disturbances in the dog. A clinical and pathologic study of 3,000 dogs. 15427

ANIMAL ANATOMY
Comparison of heat and quick freezing for relaxing nematodes prior to permanent mounting. 15082

ANIMAL BREEDING
Avian infectious hepatitis III. Treatment of chickens in egg production. 15462

ANIMAL DISEASE RESISTANCE
Results of continuous low-level inoculations with Eimeria bovis in calves. 15366

ANIMAL DISEASES
Report on the pullorum disease testing results for the 32nd northeastern conference on avian diseases. 15312

Bovine papular stomatitis. II. The experimentally produced disease. 15375

Nocardia asteroides as a mammary pathogen of cattle. I. The disease in cattle and the comparative virulence of 5 isolates. 15433

ANIMAL GENETICS

Plasma enzyme levels in chickens, a measure of drug induced pathology. 15677

ANIMAL GENETICS
A rapid, permanent Wright's staining method for chromosomes and cell nuclei. 15308

ANIMAL HISTOLOGY
Staining fixed preparations of chicken blood cells with combination may-greenwald-wright-phloxine B stain. 15344

A quick method for the diagnosis of avian pox and infectious laryngotracheitis. 15463

ANIMAL NUTRITION
The problem of Salmonella organisms in animal by-products and feeds. 15360

Albicans infection in chickens. I. Effect of vitamin A nutritional factors influencing experimental Candida deficiency. 15393

ANIMAL PHYSIOLOGY
Effect of naturally occurring highly mineralized water on the growth of laboratory animals. 15305

ANIMAL RESPIRATION
Experimental production of complicated chronic respiratory disease infection ('air sac' disease). 15365

ANIMALS
Inoculation of microbes into the intestinal tracts of small animals. 15298

The recovery of Bacterium anitratum (Sw. from animals. 15359

ANOPHELES
Susceptibility of mosquitoes to silica gel insecticides. 14920

Experimental trasmission of African horse-sickness by means of mosquitoes. 15424

ANOPHELES ALBIMANUS
Evaluation of thermal and nonthermal fogs against four species of mosquitoes. (abstract). 14987

ANOPHELES QUADRIMACULATUS
St. Louis encephalitis vector studies in Houston, Texas. 14983

ANTENNAE
Reaction thresholds and specificity of an odor receptor on the antenna of Locusta. 14863

ANTHELMINTICS
Field trials with hygromycin as an anthelmintic in poultry. 15512

Anthelmintic activity of an organic phosphate in cattle and sheep. 15515

ANTHOMYIIDAE
Diptera from Nepal. Anthomyiidae. 14800

ANTHONOMUS GRANDIS
Some histological aspects of the boll weevil. 14873

Several insects cause concern. 14991

Boll weevil survival in Carolinas higher than in 1961. 15231

Fish, wildlife unaffected by boll weevil program. 15557

Constituents of the cotton bud. the carbonyl compounds. 15637

ANTHRACNOSE (APPLES)
Cross-inoculation studies with four species of anthracnose fungi. 15010

ANTHRACNOSE (CUCUMBERS)
Anthracnose, scab, and soil rot of cucumbers. 15131

ANTHRACNOSE (PIPER NIGRUM)
Cross-inoculation studies with four species of anthracnose fungi. 15010

ANTHRACNOSE (TOMATOES)
Cross-inoculation studies with four species of anthracnose fungi. 15010

ANTHRENUS FLAVIPES
Critical application of logistic principle on the laboratory population of Anthrenus flavipes Lec. 14856

ANTIBIOTICS
Sensitivity spectrum of Bacillus thuringiensis var. thuringiensis Berliner to antibiotics, sulfonamides, and other substances. 14895

Antibiotic treatment of young loblolly pines infected with fusiform rust. 15050

Studies on the control of black rot of crucifers by treating seeds with antibiotics. 15100

Factors in the production and stimulation of some antibiotics of fungal origin inhibiting the growth of pathogenic fungi. 15140

A survey of green plants for antimicrobial substances. 15186

Antibiotic mediums for the isolation of vibrios from bull semen. 15301

Antibiotic resistance and mutation rates of mycoplasma. 15353

The emergence of resistant strains of Salmonella typhimurium in the tissues and alimentary tracts of chickens following the feeding of an antibiotic. 15370

The effects of antibiotics on experimental chronic respiratory disease in chickens. 15421

The effect of the use of antibacterial drugs, particularly as food additives, on the emergence of drug-resistant strains of bacteria in animals. 15467

Verticillate actinomycetes, producers of polyenic antibiotics. 15666

Antibiotic streptogan and process for preparation. patent 3,334,015. 15671

ANTIBODIES
Intracellular labeling of TMV antigen with ferritin-antibody conjugate. 15177

Detection of leptospires in naturally infected dogs, using fluorescein-labeled antibodies. 15309

Characterization of Vibrio fetus antigens. IV. Study of polysaccharide-antibody reactions by a rapid slide gel diffusion technique. 15310

The detection of antibody against Leptospira pomona in composite herd milk samples. 15337

Serological investigation in French cattle; research on hemagglutination inhibiting antibodies due to myxovirus parainfluenza-3. 15338

Fluorescein-labeled antibody technique for identification of leptospiral serotypes. 15348

High mortality in Florida swine herd infected with the encephalomyocarditis virus. an accompanying epizootiologic survey. 15369

Relationships between eastern and western equine encephalomyelitis viruses as demonstrated by the hemagglutination-inhibition antibody response of experimentally infeced chickens. 15419

Factors affecting the production and detection of ornithosis antibodies in infected turkeys. 15425

Antibody response to a combined living attenuated distemper - hepatitis vaccine. 15434

An indirect gel diffusion precipitation test for the detection of rinderpest antibody in convalescent cattle. 15492

Bovine babesiosis. the passive immunization of calves against Babesia argentina with special reference to the

role of complement fixing antibodies. 15517

ANTIGENS
Distribution of wound-tumor virus antigens in internal organs of an insect vector. 15182

Characterization of Vibrio fetus antigens. IV. Study of polysaccharide-antibody reactions by a rapid slide gel diffusion technique. 15310

Non-specific plate agglutination reactions with PPLO antigen. 15331

Production of foot-and-mouth disease virus with high complement-fixing antigenicity. 15428

An in vitro study of extracted antigens of Vibrio fetus isolates. 15454

Demonstrable antigens and a toxic factor in Oedema disease of swine. 15473

Detection of common antigens of apple virus isolates by complement fixation. 15635

ANTISEPTICS
Physicochemical properties of the infectious bursal agent (IBA). 15326

ANTISERUM
Cytogenetic alterations in swine kidney cells persistently infected with hog cholera virus and propagated with and without antiserum in the medium. 15437

ANYSTIS
Some observations on the fine structure of the midgut of the mite Anystis sp. 14969

AORTA
Effect of diet on aortic ruptures in turkeys induced by diethylstilbestrol. 15304

APHELINIDAE
A wide-range variable temperature cabinet for bio-ecological studies. 15689

APHIDIDAE
The hymenopterous parasites (Hymenoptera: Aphidiidae et Aphelinidae) of the pea aphid in eastern North America. 14830

Seasonal changes in the abundance of certain aphids and their predators in Egiza.. 14854

The effects of photoperiod, temperature, and food supply on rate of development and diapause in Coccinella novemnotata. 14916

Simple screening test for systemic aphicides. 14921

Effects of temperature and light on plant susceptibility to cucumber mosaic virus by aphid transmission. 15194

Biology of the black cherry aphid in the Willamette Valley, oregon. 15238

APHIDIUS
Biology of the black cherry aphid in the Willamette Valley, oregon. 15238

APHIDIUS SMITHI
Propagation of braconid parasites of the pea aphid. 14887

APROLATE
The effect of apholate and thiotepa on nucleic acid synthesis and nucleotide ratios in housefly eggs. 14930

APIS MELLIFERA
The pathogenicity for honey-bee larvae of microorganisms associated with European foulbrood. 14855

Notes: Electron microscopic investigation of sachrood of the honey bee. 14865

The effects of sampling sites on Nosema determination. 14904

The susceptibility of honey bees of different ages to infestation by Acarapis woodi (Rennie). 14905

APPLES
The influence of spray programs on the fauna of apple orchards in Nova Scotia. XII. Second supplement to VII. Effects on beneficial arthropods. 14912

Studies on a virus causing stem grooving and graft-union abnormalities in Virginia Crab apple. 15001

Occurrence and amount of stem cavity russet on golden delicious apples. 15015

Apple variety resistance to Helminthosporium leafspot. 15197

Three plans for using acaricides to control mites on apple. 15223

Ammonia injury to apples and peaches in storage. 15522

Influence of pre-storage treatments on the mortality of the San Jose scale (Homoptera: Diaspididae) on apples held in storage. 15532

Mortality of the San Jose scale (Homoptera: Diaspididae) on stored apples of different varieties and harvest dates. 15533

Notice of filing of petition regarding pesticides. 15599

Twisted twig of apple. 15616

APTENODYTES
Isolation of an anaerobic vibrio from a king penguin (Aptenodytes longirostris). 15368

AQUATIC INSECTS
Efficiency of granulated insecticides influenced by solvents used for impregnation. 14978

AQUATIC PLANTS
Insecticidal and natualistic control chironomid larvae in Lake Dalwigk, Vallejo, California. 14919

ARAMITE
Three plans for using acaricides to control mites on apple. 15223

ARANEIDAS
Life histories and habits of two species of Philodromus (Araneida: Thomisidae) in Ontario. 14936

ARBOVIRUSES
St. Louis encephalitis vector studies in Houston, Texas. 14983

ARCEUTHORIUM
Appraisal of biological control of Arceuthobium campylopodum F. campylopodum by Colletotrichum gloeosporioides. 15283

ARGAS
The subgenus Persicargas, new subgenus (Ixodoidea, Argasidae, Argas). I. A. (P.) arborens, an egyptian Persicus-like parasite of wild bees, with a redefinition of the subgenus Argas. 14828

ARGYRESTRIA
Life history of the Monterey pine needle miner, Argyresthia pilatella (Lepidoptera' Yponomentidae). 14898

ARIZONA
Tristeza virus in Arizona citrus. 14996

Grasshopper damage on short-grass rangeland of the San Carlos Apache Indian Reservation, Arizona. 15247

A fungus disease of the salt-marsh caterpillar in Arizona. 15253

ARMED FORCES
Mosquito control activities of the U.S. Armed Forces in the Republic of Vietnam. 14975

Biology of vector-associated diseases in Vietnam. 15460

ARTHRITIS
Polyarthritis in sheep. I. Description of the disease and experimental transmission. 15408

Polyarthritis in sheep. II. Characterization of the causative virus. 15409

ARTHROPODA

ARTHROPODA
Ecology of an oasis. 14809

Biology of vector-associated diseases in Vietnam. 15460

Method for treating animals infested with pests of the phylum arthropoda. patent 3,367,831. 15508

ARTICHOKES
Host range and properties of the globe artichoke curly dwarf virus. 15141

ASCARIASIS
Food additives permitted in feed and drinking water of animals or for the treatment of food-producing animals. food additives permitted in food for human consumption. thiabendazole. 15596

ASCARIS
Toxocara lesions stimulate those of Ascaris suum. 15456

ASCLEPIAS
Feeding behavior of the large milkweed bug, Oncopeltus fasciatus. 14858

ASPERGILLOSIS
Hatchery sanitation as a control measure for aspergilossis in fowl. 15496

Aspergillosis experimentally produced in hatching chicks. 15500

ASPERGILLUS
Isolation and characterisation of malformin. 15673

ASPIDIOTUS PERNICIOSUS
Influence of pre-storage treatments on the mortality of the San Jose scale (Homoptera: Diaspididae) on apples held in storage. 15532

Mortality of the San Jose scale (Homoptera: Diaspididae) on stored apples of different varieties and harvest dates. 15533

ASTER YELLOWS (BARLEY)
Comparison of aster yellows and barley dwarf viruses in two barley varieties. 15011

ASTER YELLOWS (FLAX)
Reduction of aster yellows. 15053

ATTAGENUS MEGATOMA
Sex attractant of the black carpet beetle. 14954

ATTAPENUS
Fumigant toxicity of 1,2,3-tribromopropene, ethyleneimine, crotyl bromide and carbon tetrachloride to stored-product insects. 14888

ATTAPULGITE
Treatment of diarrhoea in dogs. 15380

ATTRACTANTS
Attraction of melon flies to lures on foliage or cane fibers at various heights. 14890

La lutte chimique contre les insects nuisibles. (chemical control of insect pests). ed. 3. sB951.15. 14906

New methods of introducing visual and auditory cues. (abstract). 14974

U.SDA's long range objectives in meeting agricultural pest problems. 15286

Constituents of the cotton bud. the carbonyl compounds. 15637

AUSTRAPYX
Japygidae of South America. 4' The genus Austrjapyx and descriptions of new species. 14843

AVIAN ENCEPHALOMYELITIS
Studies on avian encephalomyelitis. II Immune responses to vaccination procedures. 15335

Studies on avian encephalomyelitis. III Immune response to beta-propiolactone inactivated virus. 15336

Eastern encephalitis in white Pekin ducklings on long island. 15356

The development of a chicken embryo lethal strain of avian encephalomyelitis virus. 15413

Avian encephalomyelitis immunization with inactivated virus. 15459

AVIAN LEUKOSIS COMPLEX
The detection of acute avian leukosis as a contagious disease. 15358

Studies on the transmission and pathology of a viral-induced avian nephroblastoma (embryonal _ephroma). 15490

AVIAN POXVIROSES
A quick method for the diagnosis of avian pox and infectious laryngotracheitis. 15463

AVITAMINOSIS
Albicans infection in chickens. I. Effect of vitamin A nutritional factors influencing experimental Candida deficiency. 15393

AVOCADOS
Notice of filing of petition regarding pesticides. 15586

AZINPHOSMETHYL
Note on identification of azinphosmethyl in human tissues. and in figs. 15579

BABESIA ARGENTINA
Bovine babesiosis: the passive immunization of calves against Babesia argentina with special reference to the role of complement fixing antibodies. 15517

BABY PIGS
Studies on enteroviruses of the pig-II. 15328

Experimental visceral larva migrans in the pig. 15355

Demonstrable antigens and a toxic factor in Oedema disease of swine. 15473

BACILLUS
The effectiveness of commercial formulations of Bacillus thuringiensis Berliner on house-fly larvae. 14864

BACILLUS THURINGIENSIS
Pigment-producing variants of Bacillus thuringiensis Berliner from the silkworm. 14953

A bioassay technique for determining the insecticidal activity of preparations containing Bacillus thuringiensis Berliner. 14960

Feed additives for control of house fly larvae in livestock feces. 15503

Dust containing Bacillus thuringiensis for control of chicken body, shaft, and wing lice. 15504

BACITRACIN METHYLENEDISALICYLIC ACID
Notice of filing of petition for food additives. 15482

BACTERIA
The effectiveness of commercial formulations of Bacillus thuringiensis Berliner on house-fly larvae. 14864

Esterases of crystalliférous bacteria pathogenic for insects: epizootiological applications. 14929

Bacterial pathogens in Iowa corn insects. 14940

The effect of the use of antibacterial drugs, particularly as food additives, on the emergence of drug-resistant strains of bacteria in animals. 15467

BACTERIAL BLACK SPOT (RADISHES)
Bacterial black spot of radish. 15176

BACTERIAL DISEASES (PLANTS)
Occurrence of two bacterial diseases on new hosts in Israel. 15209

Effect of growth-regulating and other compounds on bacterial spot of pepper. 15219

BACTERIAL SPOT (PEACHES)
Control of bacterial spot of peach. 15030

Dodine (Cyprex) effective against bacterial spot of peach. 15032

BACTERIAL SPOT (PEPPERS)
Bacterial spot disease of tomatoes and peppers in Israel. 15210

BACTERIAL SPOT (REDPEPPERS)
Effect of growth-regulating and other compounds on bacterial spot of pepper. 15219

BACTERIAL SPOT (TOMATOES)
Bacterial spot disease of tomatoes and peppers in Israel. 15210

BACTERIAL VACCINES
Studies on pasteurellosis. IV. Killed fowl cholera vaccine absorbed on aluminum hydroxide. 15381

Studies on pasteurellosis. III. Control of experimental fowl cholera in chickens and turkeys with an emulsified killed vaccine. 15382

BACTERIAL WILT (TOBACCO)
The influence of reducing substances on resistance to bacterial wilt of tobacco. 15119

BACTERICIDES
Variation in the inflammatory response and bactericidal activity of the sheep uterus during the estrous cycle. 15296

BACTERIOLOGY
Further studies on the causative organism of ulcerative enteritis. 15429

A bacterial agent causing bluecomb disease in turkeys. 1. Isolation and preliminary laboratory investigations. 15480

BALSAMS
Mined buds, a hibernation site for spruce budworm. 14804

Host-parasite relationships of garden balsam and some nematodes. 15265

BANANAS
Peroxidases and their relation to vascular browning in banana roots. 15117

BARLEY
Comparison of aster yellows and barley dwarf viruses in two barley varieties. 15011

The effect of pericarp on covered smut infection of naked barley varieties. 15096

Nucleotide composition of RNA in healthy and mildew-infected leaves of barley. 15120

Effect of moisture content and length of storage period upon germination percentage of seeds of corn, wheat, and barley free of storage fungi. 15524

Varying the EMS effect on barley by changing the various treatment and postwashing temperatures. 15614

Phenotypic restoration of fertility in a male-sterile mutant by treatment with gibberellic acid. 15629

BATHS
A constant temperature bath for pot-grown plants. 15688

BATS
Salmonella and Shigella infections in bats in selected areas of Colombia. 15316

BAYER 25141
Mammalian detoxification of insecticides. 14989

BAYGON
Persistence of two systemic carbamate insecticides in three types of soils. 15541

BEANS
An evaluation of the rate of reproduction of the two-spotted spider mite reared on gibberellin-treated bean plants. 14876

Lysozyme-like action of enzymes from the cockroach Periplaneta americana and from some other sources. 14934

Pathogenicity of isolates of the bean wilt Fusarium from England and the United States. 15006

A difference in the translocability of two viruses in bean plants. 15170

Population trends and movement of Corynebacterium flaccumfaciens var. aurantiacum in tolerant and susceptible beans. 15172

A seed-borne bean virus of wide host range. 15185

Effect of removing the terminal bud of bean plants upon protein changes after infection by the bean rust fungus. 15192

Lesion maturation, fungal development, and distribution of endopolygalacturonase and cellulase in Rhizoctonia infected bean hypocotyl tissues. 15207

Invasion of and damage to bean seed by storage fungi. 15525

Metabolism of 2-chloro-4,5-dimethylphenyl N-methylcarbamate in bean plants. 15619

Inhibition of plant growth by halogenated benzoic acids. 15628

Properties of purified acid phosphatases from healthy and rust-infected bean leaves. 15652

Respiration, photosynthesis, and dark fixation of C14O2 by healthy and rusted bean leaves. 15653

BEAUVERIA BASSIANA
Preliminary laboratory tests utilizing Beauveria bassiana (Balsamo) Vuillemin on Calomycterus setarius Boelofs. 15234

BEES
A note on Boplitis producta (Cress.) in Wisconsin (Hymenoptera: Megachilidae). 14833

Time memory of bees under the influence of narcosis and of social pacemaking signals (Zeitgeber). 14917

BEETS
Beet yellow stunt virus. 15043

BENEFICIAL INSECTS
The influence of spray programs on the fauna of apple orchards in Nova Scotia. XII. Second supplement to VII. Effects on beneficial arthropods. 14912

The biology and ecology of Dendroctonus valens Lec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans) Zimm in central Mexico (Coleopterai Scolytidae). 15165

BENTONITE
Detection of potato virus X in tubers by the bentonite flocculation test. 15175

BENZAMIDE
The effect of circadian rhythm on the development of Drosophila. 14941

BENZENE HEXACHLORIDE
Relative susceptibility of salt-marsh mosquitoes from Georgia and Florida to insecticides. 14967

Efficiency of granulated insecticides influenced by solvents used for impregnation. 14978

Insecticidal control of paedogenetic cecid larvae in mushroom beds. I. Incorporation of insecticides into coonpost. II. Incorporation of insecticides in the casing layer. 15241

Screening method for the detection of chlorinated hydrocarbon pesticide residues in the fat of milk, cheese, and butter. 15572

BETA BAYS
Experimental hypopituitarism in swine: a stereotaxic method of inducing the condition with beta irradiation. 15455

BETA-SITOSTEROL

BETA-SITOSTEROL
The fate of dietary H3-beta-sitosterol in the adult house fly. 14923

BIDRIN
Distribution of bidrin in the foliage of treated trees. 15230

Late-season control of European elm scale with bidrin trunk injections. 15612

BIG VEIN (LETTUCE)
Effects of big vein on the irrigated head lettuce crop. 15122

BIGHORN SHEEP
Erythrocyte survival studies in domestic and bighorn sheep, using glycine-2-C14. 15299

BILIRUBIN
Some observations on field cases of facial eczema: liver pathology and determination of serum bilirubin, cholesterol, transaminase and alkaline phosphatase. 15354

BIOCHEMISTRY
Some biochemical effects of alkylating agents. 15676

BIOLOGICAL ASSAY
Simple screening test for systemic aphicides. 14921

A bioassay technique for determining the insecticidal activity of preparations containing Bacillus thuringiensis Berliner. 14960

Biological activity of surfactants and some chemical intermediates against pre-imaginal mosquitoes. 14979

A bioassay for volatile toxicants from fungicides in soil. 15162

BIOLOGICAL CONTROL (INSECTS)
Nutritional pest control: The 'self-protection' of foodstuffs against Tribolium confusum (Coleoptera: Tenebrionidae) often presumably through nutritional factors. 14824

Dispersal and migration of tepa-sterilized Mexican fruit flies. 14842

Attraction of melon flies to lures on foliage or cane fibers at various heights. 14890

Esterases of crystalliferous bacteria pathogenic for insects: epizootiological applications. 14929

Note: Elimination of microsporidiosis in laboratory-reared European corn borers by the use of heat. 14939

A bioassay technique for determining the insecticidal activity of preparations containing Bacillus thuringiensis Berliner. 14960

Interference with the biological control of cottony-cushion scale by insecticides and attempts to re-establish a favorable natural balance. 15224

Control of the eastern tent caterpillar, Malacosoma americanum (Fabricius), by distribution of spores of two species of Clostridium. 15226

Spicaria rileyi (Farlow) Charles, an entomogenous fungus of Tricboplusia ni Huebner). 15237

Standardization of Bacillus thuringiensis products. homology of standard. 15696

BIOLOGICAL CONTROL (PESTS)
U.SDA's long range objectives in meeting agricultural pest problems. 15286

BIOLOGICAL CONTROL (WEEDS)
Food-plant spectrum and elimination of disease of cinnabar moth larvae, Hypocrita jacobaeae (L.) (lepidoptera: Arctiidae). 15276

Appraisal of biological control of Arceuthobium campylopodum F. campylopodum by Colletotrichum gloeosporioides. 15283

BIOLOGY
Biology of the black cherry aphid in the Willamette Valley, oregon. 15238

BIOPSY
The diagnosis of equine infectious anemia using the complement-fixation test, Siderocyte counts, hepatic biopsies, and serum protein alterations. 15385

Vertebral biopsy in cattle. 15445

BIPHENYL
A new method of applying biphenyl for the control of citrus fruit rots. 15069

BIRDS
The subgenus Persicargas, new subgenus (Ixodoidea, Argasidae, Argas). I. A. (P.) arboreus, an egyptian Persicus-like parasite of wild bees, with a redefinition of the subgenus Argas. 14828

Report on the pullorum disease testing results for the 32nd northeastern conference on avian diseases. 15312

Cultivation of Mycoplasma of avian origin. 15314

Response of birds to one intranasal vaccination with B-1 strain of Newcastle disease virus. 15449

Revaccination of chickens against Newcastle disease by vent, wing-web, and intramuscular routes. 15495

A cardiac bleeding technique for small birds. 15691

BIURET
Notice of filing of petition for food additive biuret. 15483

BLACK SPOT (CITRUS)
Temperature factors in the control of black spot of citrus. 15528

BLACK STEM (ALFALFA)
Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

BLATTELLA GERMANICA
A tergal abnormality in the German cockroach, Blatella germanica (L.). 14944

DDT and related compounds in dog food and CSMA media used in insect rearing. 15611

BLATTIDAE
The occurrence of acetylcholine in the nervous tissues of American cockroaches. 14874

BLIGHT (CAMELLIA)
A report of the occurrence of Camellia flower blight in Mississippi. 15027

BLIGHT (RAPE)
Control of Alternaria blight of rape and mustard by griseofulvin. 15085

BLISTER BLIGHT (TEA)
Epidemiology of tea blister blight (Exobasidium vexans). iII. Spore deposition and disease prediction. 15095

BLOAT
The etiology of legume bloat-nonvolatile acids. 15457

BLOOD
Changes in haemolymph lipoproteins during locust flight. 14914

The determination of chlorinated insecticides in human blood. 15556

Lethal endrin concentration in the blood of gizzard shad. 15603

Hexane extractable chlorinated insecticides in human blood. 15606

A cardiac bleeding technique for small birds. 15691

BLOOD CELLS
Staining fixed preparations of chicken blood cells with combination may-greenwald-wright-phloxine B stain. 15344

BLOOD PLASMA
Plasma enzyme levels in chickens, a measure of drug induced pathology. 15677

Transaminases and dehydrogenases in chicken plasma. 15678

BLOOD PROTEINS
The diagnosis of equine infectious anemia using the complement-fixation test, Siderocyte counts, hepatic biopsies, and serum protein alterations. 15385

BLUE COMB
A bacterial agent causing bluecomb disease in turkeys. 1. Isolation and preliminary laboratory investigations. 15480

BOMBYX MORI
Nucleic acids extracted from the virus polyhedra of the silkworm, Bombyx mori (Linnaeus). 14850

Interference between cytoplasmic-polyhedrosis viruses of the silkworm, Bombyx mori (Linnaeus), and of the pine caterpiller, Dendrolimus spectabilis (Butler). 14852

The effectiveness of formalin in controlling jaundice (nuclear polyhedrosis) of the silkworm in Poland. 14885

Demonstration of nuclear polyhedrosis in Bombyx mori (Linnaeus) by fluorescent antibody technique. 14903

Pigment-producing variants of Bacillus thuringiensis Berliner from the silkworm. 14953

BONES
The ages at which the centers of ossification appear roentgenographically in the limb bones of the dog. 15295

BOOPHILUS ANNULATUS MICROPLUS
Acaricida tests on the biarra strain of organophosphorus resistant cattle tick Boophilus microplus from southern Queensland. 15506

BORATED
Colonization of shortleaf pine stumps. 14990

BORAX
Colonization of shortleaf pine stumps. 14990

BORDEAUX MIXTURE
Effect of Bordeaux spray and plastic covering in preventing invasion of low-temperature-injured stems of prune trees by cytospora fungi. 15074

BORDETELLA PERTUSSIS
Experimental inactivated-virus hog cholera vaccines' induction period of immunity. 15435

BOTULISM
Case report- botulism type C outbreak on a pheasant game farm. 15486

BOVINE ENTEROVIRUSES
Studies of bovine enteroviruses. 15415

BOVINE PAPULAR STOMATITIS VIRUS
Bovine papular stomatitis. II. The experimentally produced disease. 15375

BOVINE RHINOTRACHEITIS VIRUS
The isolation of infectious bovine rhinotracheitis virus from cattle affected with conjunctivitis-observations on the experimental infection. 15313

BRAIN
Exterotoxemia of sheep. II. distribution of I131 radioiodinated serum albumin in brains of Clostridium perfringens type D intoxicated lambs. 15376

Exterotoxemia of sheep. I. Effects of Clostridium perfringens type D toxin on the brains of sheep and mice. 15377

Isolation of Listeria monocytogenes from brains of rabies-negative animals. 15438

BREEDING
Phenotypic restoration of fertility in a male-sterile mutant by treatment with gibberellic acid. 15629

An inexpensive and effective indoor insectary. 15679

BRISKET DISEASE
Electron microscopy of the bovine heart in congestive failure of high mountain disease. 15361

BROADBEANS
An outbreak of broadbean diseases in Iran. 15091

BRONCHITIS VACCINES
A pasture trial using 2 immunizing doses of a parasitic bronchitis vaccine. 15391

BROWN ROT (CHERRIES)
Relation between residues of folpet and control of brown rot on sour cherry fruit in Door County, Wisconsin, 1962. 15137

BROWN STEM ROT (SOYBEANS)
Control of brown stem rot of soybeans with corn-soybean rotations. 15045

BRUCELLA ABORTUS ANTIGENS
Studies on an immunogenic agent against Brucella abortus. II. Preliminary studies of an immunologically active soluble agglutinogen. 15287

BRUCELLA OVIS
Detection of precipitins against Brucella ovis. 15406

BRUCELLOSIS
A beat-inactivation test for differentiating specific and nonspecific agglutination reactions for bovine brucellosis. 15315

BULLS
The effects of exogenous testosterone on spermatogenesis of bulls. 15300

BUQUINOLATE
The spectrophotofluorometric determination of buquinolate in poultry tissue and eggs. 15511

BUTTER
Screening method for the detection of chlorinated hydrocarbon pesticide residues in the fat of milk, cheese, and butter. 15572

CABBAGE
Resistance of Brassica oleracea varieties to downy mildew. 15142

The relative resistance to insect attack of three cabbage varieties at different stages of plant maturity. 15284

Seasonal shifts in the relative resistance to insect attack of eight commercial cabbage varieties. 15285

CACODYLIC ACID
Bark beetle mortality in precommercial herbicide thinnings of western hemlock. 15245

CACTOBLASTIS CACTORUM
A cytoplasmic polyhedrosis of Cactoblastis cactorum (Berg). 14963

CAFFEINE
In vitro increase in virus infectivity. II. 15221

CALCINOSIS
Calcium gout (Kalkgicht) and calcinosis circumscripta in dogs. 15345

Effects of fluoride on magnesium deficiency in the guinea pig. 15446

CALCIUM
Control of chronic respiratory disease. II. The effect of low calcium diet, terephthallic acid and chlortetracycline. 15383

Effect of carbon source and calcium on growth of Pythium ultimum. 15638

CALCIUM NITRATE

CALCIUM NITRATE
Calcium nitrate for field control of tomato southern blight in South Carolina. 15183

CALIFORNIA
Interference with the biological control of cottony-cushion scale by insecticides and attempts to re-establish a favorable natural balance. 15224

CALIFORNIA ENCEPHALITIS VIRUS
St. Louis encephalitis vector studies in Houston, Texas. 14983

CALLIBAETIS
The submaginal cuticle of the mayfly Callibaetis sp. (Ephemeroptera). 14942

CALOMYCTERUS SETARIUS
Preliminary laboratory tests utilizing Beauveria bassiana (Balsamo) Vuillemin on Calomycterus setarius Boelofs. 15234

CALVES
Gamma globulin levels and neonatal mortality in market calves. 15372

Studies on shipping fever of cattle. II. Prevalence of Pasteurella species in nasal secretions from normal calves and calves with shipping fever. 15387

Studies in anaplasmosis. IV. Development of the causative agent in deer erythrocytes transfused into calves. 15398

Virus diseases in calves. 15426

Clinical management of neonatal diarrhea in calves, with special reference to pathogenisis and diagnosis. 15447

Pathogenis and prevention of infectious diarrhea (scours) of newborn calves. 15452

Cellular response to endogenous stages of Coccidia in cattle, with observations of the influence of chemicals upon the host-parasite relationship. 15509

CAMELS
Survey on the helminths of dromedary in Chad, with special referrence to gastro-intestinal strongylosis and haemonchosis (Haemonchus longistipes). 15514

CANADA
Parasites of the red-pine sawfly, Neodiprion nanulus nanulus (Hymenoptera: Diprionidae), in New Brunswick. 14844

Development of DDT resistance in certain mayflies in New Brunswick. 14970

CANKER (CRABAPPLES)
Cankers of ornamental crabapples associated with Physalospora obtusa and other microorganisms. 15105

CANKER (FRUIT)
Ceratocystis canker of stone fruit trees. 15037

CAPTAN
Control of bacterial spot of peach. 15030

Action of soil fungicides. IV. changes in the spectrum of soil fungi. V. sensitivity of soil organism in vitro. 15041

Control of diseases of shallots. 15521

CARBAMATES
Inhibition of housefly acetylcholinesterase by carbamates. 14891

Soil treatments with broadcast or band applications of organophosphorous or carbamate insecticides for prevention of wireworm damage to potatoes. 15227

New nematocides. 15268

Persistence of two systemic carbamate insecticides in three types of soils. 15541

The behavior of DDT and Zectran on a forest soil. 15544

Determination of Niagara NIA-10242 and its phenol degradation product in corn silage and milk and determination of other carbamates by GLC of their thiophosphoryl derivatives. 15552

Degradation of carbamate herbicides in soil. 15567

Thin layer chromatography of some carbamate and phenylurea pesticides. 15661

CARBANILATES
Chemicals tested as space repellents for yellow-fever mosquitoes. II. carbanilates, benzamides, aliphatic amides, and imides. 14915

CARBARYL
The biology and ecology of Dendroctonus valens Lec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans) Zimm in central Mexico (Coleopterai Scolytidae). 15165

Control of the pickleworm on cucurbits. 15228

The control of poultry lice and mites with several organic incecticides. 15240

Effectiveness of various formulations of five insecticides on insects infesting douglas-fir logs. 15250

Field tests with insecticides for control of lone star ticks on cattle. 15502

CARBON
Effect of carbon source and calcium on growth of Pythium ultimum. 15638

CARBON DIOXIDE
Effects of carbon dioxide anesthesia on the house cricket, Acheta domesticus (Orthoptera: Gryllidae). 14932

Swine serum and CO2 in the isolation of avian PPLO. 15364

CARBON ISOTOPES
Metabolism of 2-chloro-4,5-dimethylphenyl N-methylcarbamate in bean plants. 15619

CARBON TETRACHLORIDE
Fumigant toxicity of 1,2,3-tribromopropene, ethyleneimine, crotyl bromide and carbon tetrachloride to stored-product insects. 14888

Pharmacology and toxicology of carbon tetrachloride in the sheep. IV. reduction and augmentation of toxicity to sheep. 15397

CARBONYL COMPOUNDS
Constituents of the cotton bud. the carbonyl compounds. 15637

CAROTENOIDS
Prevention of photodynamic killing of fungal cells by carotenoids. 15620

CARROTS
Determination of linuron and its known and/or suspected metabolites in crop materials. 15566

Food and food products. tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. O-Phenylphenol and its sodium salt. 15593

CASSIA OCCIDENTALIS
Cassia occidentalis toxicosis in cattle. 15410

CATS
Neoplasms of the canine and feline urinary bladder: Clinical findings, diagnosis, and treatment. 15423

CATTLE
Fecal elimination of estrogens by cattle treated with diethylstilbestrol and hexestrol. 15290

The measurement of bovine thyroid activity using low dosages of radioactive iodine I131. 15297

The isolation of infectious bovine rhinotrachetis virus from cattle affected with conjunctivitis-observations on the experimental infection. 15313

A heat-inactivation test for differentiating specific and nonspecific agglutination reactions for bovine brucellosis. 15315

Isolation and properties of bovine herpesvirus from a calf

with respiratory disease and keratoconjuctivitis. 15323

Serological investigation in French cattle; research on hemagglintination inhibiting antibodies due to myxovirns parainfluenza-3. 15338

Foot-and-month disease virus- its behavior in cattle after serial passages in chicken embryos and chicks. 15352

Electron microscopy of the bovine heart in congestive failnre of high mountain disease. 15361

Results of continuous low-level inocnlations with Eimeria bovis in calves. 15366

Plagne characteristics of fonr classes of bovine virnses. 15374

Stndies on shipping fever of cattle. II. Prevalence of Pastenrella species in nasal secretions from normal calves and calves with shipping fever. 15387

Experimental water intoxication in calves. 15396

Cassia occidentalis toxicosis in cattle. 15410

Chemical and electrophoretic studies of the serums of cattle infected natnrally with Asia-1 type foot-and-mouth disease virns. 15431

Nocardia asteroides as a mammary pathogen of cattle. II. the sources of nocardial infection and experimental reproduction of the disease. 15432

Nocardia asteroides as a mammary pathogen of cattle. I. The disease in cattle and the comparative virulence of 5 isolates. 15433

Vertebral biopsy in cattle. 15445

Electron microscopy of Anaplasma marginale in the bovine erythrocyte. 15461

Clinical and hematologic stndies of lymphosarcoma in a herd of cattle. 15477

Notice of filing of petition for food additives. 15482

Food additives permitted in the feed and drinking water of animals of for the treatment of food-producing animals. food additives permitted in food for human consumption. erythromycin. 15484

An indirect gel diffusion precipitation test for the detection of rinderpest antibody in convalescent cattle. 15492

Field tests with insecticides for control of lone star ticks on cattle. 15502

Comparative efficiency of conmaphos applications on varions body areas by brush-on or pour-on for the control of cattle grubs. 15505

Acaricida tests on the biarra strain of organophosphorus resistant cattle tick Boophilns microplus from southern Qneensland. 15506

Cattle grub control with Bayer 21-199 in the Everglades. 15513

Anthelmintic activity of an organic phosphate in cattle and sheep. 15515

Bovine babesiosis. the passive immnnization of calves against Babesia argentina with special reference to the role of complement fixing antibodies. 15517

Three gastro-intestinal nematodes recently recorded from British cattle. 15518

Snrvival of infective larvae of the cattle nematodes, Cooperia punctata, Trichostrongylus axei, and Oesophagostomum radiatnm. 15519

Note on identification of azinphosmethyl in human tissues. and in figs. 15579

Toxicologic effects of a phosphorothioic acid insecticide in cattle. 15610

CELL NUCLEUS
A rapid, permanent Wright's staining method for chromosomes and cell nuclei. 15308

Nuclear condition and division in vegetative hyphae of Rhizoctonia solani. 15644

CELL WALL
Lysozyme-like action of enzymes from the cockroach Periplaneta americana and from some other sources. 14934

CELLS
Cellular response to endogenous stages of Coccidia in cattle, with observations of the inflnence of chemicals upon the host-parasite relationship. 15509

Some biochemical effects of alkylating agents. 15676

CELLULASE
Lesion maturation, fungal development, and distribntion of endopolygalactnronase and cellulase in Rhizoctonia infected bean hypocotyl tissues. 15207

CELLULOSE
In vitro degradation of oxalate and of cellnlose by rumen ingesta from sheep fed halogeton glomeratus. 15390

CERATOCYSTIS CANKER
Ceratocystis canker of stone fruit trees. 15037

CERCOSPORA
Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

CESTODA
Chemical ovicidal measures as applied to Taenia hydatigena, Taenia ovis, Taenia pisiformis, and Echinococcus granulosns. 15516

CHALCIDAE
Viability of the chalcid parasite Tetrastichus pyrillae Crawford from the host Pyrilla perpnsilla Walker egg. 14829

CHALCIDOIDEA
A wide-range variable temperature cabinet for bio-ecological stndies. 15689

CHEESE
Screening method for the detection of chlorinated hydrocarbon pesticide residues in the fat of milk, cheese, and butter. 15572

CHEMICAL CONTROL (INSECTS)
Chemicals tested as space repellents for yellow-fever mosquitoes. II. carbanilates, benzamides, aliphatic amides, and imides. 14915

Insecticidal and natualistic control chironomid larvae in Lake Dalwigk, Vallejo, California. 14919

Cross-tolerance of California Aedes nigromacnlis (Ludlow) larvae to EPN, Abate, and Durshan. (abstract). 14973

Infestation of the imported fire ant, Solenopsis saevissima v. richteri, at Fort Benning, Georgia. 14981

1967 insecticide recommendations; peach insect control (commercial). 15225

Control of the picklevorm on cucnrbits. 15228

Bark beetle mortality in precommercial herbicide thinnings of western hemlock. 15245

Preliminary study on some of the factors affecting control of western corn rootworm larvae with soil insecticides. 15246

Method for treating animals infested with pests of the phylum arthropoda. patent 3,367,831. 15508

Influence of pre-storage treatments on the mortality of the San Jose scale (Homoptera: Diaspididae) on apples held in storage. 15532

Mortality of the San Jose scale (Homoptera: Diaspididae) on stored apples of different varieties and harvest dates. 15533

CHEMICAL CONTROL (NEMATODES)

Late-season control of European elm scale with bidrin trunk injections. 15612

CHEMICAL CONTROL (NEMATODES)
A method for assaying nematocidal activity of experimental chemicals. 15260

Soil fumigation by injection and irrigation for the control of nematodes on hops. 15261

New nematocides. 15268

CHEMICAL CONTROL (PLANT DISEASES)
Steroid alkaloids in the disease resistance of white potato tubers. 14995

Spray programs and the control of sooty blotch of apples. 15031

Dodine (Cyprex) effective against bacterial spot of peach. 15032

Effect of s-triazine and phenylurea herbicides on soil fungi in corn- and soybean-cropped soil. 15093

A study of symptoms and control of Phomopsis juniperovora on Arizona cypress. 15127

A bioassay for volatile toxicants from fungicides in soil. 15162

Calcium nitrate for field control of tomato southern blight in South Carolina. 15183

Reduction of peach decays by hydrocooling with chemical solutions and chemically treated ice. 15188

Factors affecting field performance of nickel salt plus dithiocarbamate fungicide mixtures for the control of wheat rusts. 15201

Control of plant-nematodes and weeds in holly nurseries. 15257

Preliminary studies on the control of nematodes in outdoor rose plantings. 15270

CHEMICAL CONTROL (WEEDS)
Shift to chemical weed control hastens change from mules to tractors. 15278

Inhibition of photochemical activity of isolated chloroplasts by acylanilides. 15280

Herbicidal control of tall larkspur. 15282

CHEMICALS
Chemicals tested as space repellents for yellow-fever mosquitoes. II. carbanilates, benzamides, aliphatic amides, and imides. 14915

Metabolism in vitro of phloridzin and other compounds by Venturia inaequalis. 15627

CHEMOSTERILANTS
Dispersal and migration of tepa-sterilized Mexican fruit flies. 14842

La lutte chimique contre les insects nuisibles. (chemical control of insect pests). ed. 3. sB951.15. 14906

Sexual sterilization of screw-worm flies by N,N'-tetramethylenebis(1-aziridinecarboxamide): influence of route of administration. 15501

Chemical structure and sterilizing activity of N,NO-alkylenebis-(1-aziridinecarboxamides) in screw-worm flies. 15605

CHERRIES
Behavior of western X virus in wellrogued peach and cherry orchards. 15075

Biology of the black cherry aphid in the Willamette Valley, oregon. 15238

CHICK EMBRYOS
Foot-and-mouth disease virus. II. Propagation and modification of 3 immunologic types of virus in embryonating chicken eggs. 15498

CHICKEN EMBRYO LETHAL ORPHAN VIRUS
Tissue culture propagation and pathology of a CELO virus. 15339

CHICKENS
Leukosis - Transmission by beetles. 15311

Isolation of an unidentified myxovirus from chickens with a respiratory disease. 15320

Report of the Committe on Nomenclature and Reporting of Disease, Northeastern Conference on Avian Disease, June, 1962. 15340

Atypical Pasteurella infections in chickens. 15342

Staining fixed preparations of chicken blood cells with combination may-grenwald-wright-phloxine B stain. 15344

The emergence of resistant strains of Salmonella typhimurium in the tissues and alimentary tracts of chickens following the feeding of an antibiotic. 15370

Size, score and speed of development of tumors in chickens in response to subcutaneous inoculations with rous sarcoma virus. 15379

Studies on pasteurellosis. III. Control of experimental fowl cholera in chickens and turkeys with an emulsified killed vaccine. 15382

Albicans infection in chickens. I. Effect of vitamin A nutritional factors influencing experimental Candida deficiency. 15393

The isolation of viruses from the cecal tonsils of chickens and turkeys. 15405

Relationships between eastern and western equine encephalomyelitis viruses as demonstrated by the hemagglutination-inhibition antibody response of experimentally infeced chickens. 15419

The effects of antibiotics on experimental chronic respiratory disease in chickens. 15421

Transmission of chronic respiratory disease in chickens. 15422

An epizootic of histiocytic sarcomas in chickens induced by a cell-free agent. 15430

The influence of terephthalic acid on oxytetracycline serum levels in chickens, Studies on mode of action, I. 15442

Conjunctivitis in chickens caused by a typical infectious laryngotracheitis virus. 15450

Avian infectious hepatitis III. Treatment of chickens in egg production. 15462

Anreomycin chlortetracycline as a preventive for experimental synovitis in chickens. 15466

Study of chicken sarcoma (strain 13) placed in the bursa of Fabricius. 15472

Revaccination of chickens against Newcastle disease by vent, wing-web, and intramuscular routes. 15495

Aspergillosis experimentally produced in hatching chicks. 15500

Dust containing Bacillus thuringiensis for control of chicken body, shaft, and wing lice. 15504

Method for residues of Zytron, O-2,4-dichlorophenyl O-methyl isopropylphosphoramidothioate, in chicken tissues and eggs. 15565

Plasma enzyme levels in chickens, a measure of drug induced pathology. 15677

Transaminases and dehydrogenases in chicken plasma. 15678

Tissue culture and chicken embryo technigues for infectious laryngotracheitis virus studies. 15680

CHICKS
Foot-and-mouth disease virus- its behavior in cattle after serial passages in chicken embryos and chicks. 15352

The detection of acute avian leukosis as a contagious disease. 15358

Foot-and-mouth disease virus. I. Propagation of 3 immunologic types of virns in chicks. 15499

CHILO SUPPRESSALIS
Descriptions of larval and pupal stages of four lepidopterons rice borers in Malaysian Borneo (Sarawak). 14945

CHILOPODA
The skeletomuscular mechanism of the so-called anal legs in the centipede Scolopendra amazonica (Scolopendridae). 14897

CHIRONOMIDAE
Insecticidal and natualistic ccntrol chironomid larvae in Lake Dalwigk, Vallejo, California. 14919

CHLORAMPHENICOL
Chemicals for plant disease control. 15128

Effect of chloramphenicol on the concentrations of free amino acids and amides in healthy and cucumber mosaic virns (CMV- Y) infected plants. 15655

CHLORINATED HYDROCARBONS
The behavior of DDT and Zectran on a forest soil. 15544

Extraction of chlorinated pesticide residues from nonfatty samples of low moistnre content. 15550

Infrared identification of chlorinated insecticides in the tissnes of poisoned fish. 15553

The determination of chlorinated insecticides in human blood. 15556

Analysis of chlorinated pesticide residnes in fats and oils, ntilizing dimethyl snlfoxide: a collaborative study. 15558

Stndy of modifications of the Mills procednre for chlorinated pesticides in dairy products. 15562

Rapid cleannp of dairy products for analysis of chlorinated insecticide residue hy electron capture gas chromatography. 15568

Determination of DOT and related snbstances in human fat. 15569

Metaholism of dDT and some other chlorinated organic componnds hy Aerobacter aerogenes. 15571

Screening method for the detection of chlorinated hydrocarhon pesticide residnes in the fat of milk, cheese, and hntter. 15572

Loss of chlorinated hydrocarhon insecticides from soil snrface in the field. 15573

Rapid screening method for DDT in milk with gas chromatography. 15580

Sweep co-Distillation cleanup of milk for determination of organophosphate and chlorinated hydrocarhon pesticides. 15601

Hexane extractable chlorinated insecticides in human blood. 15606

Semi-antomatic extraction of organic materials from water. puhlic Health Service Water Pollution Surveillance System Applications and Development Report 16. 15665

CHLORO-4,5-DIMETHYLPHENYL N-METHYLCARHAMATE, 2-
Metaholism of 2-chloro-4,5-dimethyplhenyl N-methylcarhamate in hean plants. 15619

CHLORONANA
Stndies of the Gyponidae' a new genns- Chloronana (Homoptera' Cicadellidae). 14812

CHLOROPLASTS
Inhihition of photochemical activity of isolated chloroplasts hy acylanilides. 15280

CHLOROTIC DWARF (PINUS STROBUS)
Snsceptihility of eastern white pine to chlorotic dwarf. 15039

CHLORTETRACYCLINE
Control of chronic respiratory disease. II. The effect of low calcium diet, terephthallic acid and chlortetracycline. 15383

Safety and tissue residue evaluations in swine fed rations containing chlortetracycline, snlfamethazine, and penicillin. 15411

Aureomycin chlortetracycline as a preventive for experimental synovitis in chickens. 15466

Effects of vitamin-A deficiency and high-level chlortetracycline on experimental candidiasis of turkeys. 15479

CHOCOLATE SPOT (BROADBEANS)
An outhreak of hroadhean diseases in Iran. 15091

CHOLESTEROL
Distrihution and fate of 4-C14 cholesterol in the adult male American cockroach. 14896

Some ohservations on field cases of facial eczema: liver pathology and determination of serum hiliruhin, cholesterol, transaminase and alkaline phosphatase. 15354

CHOLINESTERASES
Metaholism of malathion in desert locust. i. activation of malataion into an anticholinesterase. 14918

Correlation of the effects of parathion on erythrocyte cholinesterase with symptomatology in pigs. 15574

CHORISTONEURA
Mined huds, a hihernation site for spruce hudworm. 14804

CHORISTONEURA FUMIFERANA
Determination of Zectran residues in aerial forest spraying. 15576

CHORIZAGROTIS
Roll weevil survival in Carolinas higher than in 1961. 15231

CHORIZAGROTIS AUXILIARIS
Migration of the army cutworm, Chorizagrotis anxiliaris _Lepidoptera, Noctnidae). i. evidence for a migration. 14835

CHROMATOGRAPHY
Sex pheromones of noctuid moths. VII. Quantitative aspects of the production and release of pheromone hy females of Trichoplnsia ni (Lepidoptera:Noctuidae). 14882

A semi-guantitative determination of aflatoxin B in groundnut meal, groundnnts and peanut hutter. 15292

Microcoulometric gas chromatography analysis of selected herhicides in water. 15540

Determination of Niagara NIA-10242 and its phenol degradation product in corn silage and milk and determination of other carhamates hy GLC of their thiophosphoryl derivatives. 15552

Infrared identification of chlorinated insecticides in the tissues of poisoned fish. 15553

Analysis of chlorinated pesticide residues in fats and oils, ntilizing dimethyl snlfoxide: a collaborative study. 15558

Gas chromatographic determination of residues of organophosphorus pesticides with a modified flame ionization detector. 15561

Metaholism of TOK herhicide in dairy cov. 15564

Method for residnes of Zytron, O-2,4-dichlorophenyl O-methyl isopropylphosphoramidothioate, in chicken tissues and eggs. 15565

Determination of linnron and its known and/or snspected metahalites in crop materials. 15566

Rapid cleanup of dairy products for analysis of chlorinated insecticide residue hy electron capture gas chromatography. 15568

CHROMOSOMES

Determination of DOT and related substances in human fat. 15569

Metabolism of dDT and some other chlorinated organic compounds by Aerobacter aerogenes. 15571

Screening method for the detection of chlorinated hydrocarbon pesticide residues in the fat of milk, cheese, and butter. 15572

Determination of Zectran residues in aerial forest spraying. 15576

The determination of pesticides in tissues with the electron capture detector without prior cleanup. 15578

Extraction of the water with hexane followed by detection and assay using chromatographs equipped with electron capture and micro-coulometer detectors. 15600

Sweep co-Distillation cleanup of milk for determination of organophosphate and chlorinated hydrocarbon pesticides. 15601

Selective residue determination of sulfur-, halogen-, and phosphorus-containing pesticides by helium-plasma emission spectrometry. 15656

Thin layer chromatography of some carbamate and phenylurea pesticides. 15661

Electron capture gas chromatography. 15674

CHROMOSOMES
A rapid, permanent Wright's staining method for chromosomes and cell nuclei. 15308

CHRONIC RESPIRATORY DISEASE
Treatment of chronic respiratory disease with tylosin. 15321

The histopathologic characteristics of diseases producing inflamation of the air sacs in turkeys-a comparative study. 15324

Control of chronic respiratory disease. II. The effect of low calcium diet, terephthallic acid and chlortetracycline. 15383

The effects of antibiotics on experimental chronic respiratory disease in chickens. 15421

Transmission of chronic respiratory disease in chickens. 15422

The therapeutic value of terramycin-TPA on CRD. 15491

CHRYSANTHEMUM
Stemphylium ray speck of chrysanthemum. 15195

CHRYSOMELIDAE
Sound production by the cereal leaf beetle. 14958

CICADELLIDAE
Characters for specific identification of females in the leafhopper genus Empoasca (Hemiptera:Cicadellidae). 14838

Preliminary note on transmission of a virus disease resembling tungro of rice in India and other virus-like symptoms. 15159

CICADIDAE
Changes in haemolymph lipoproteins during locust flight. 14914

CIMBICIDAE
Adaption of a nuclear-polyhedrosis virus of Trichiocampus viminalis (Fallen) to larvae of Trichiocampus irregularis (Dyar). 14956

CITRON
Variability of seedling clones of citron as indicators of exocortis virus of citrus. 14997

CITRUS
Tristeza virus in Arizona citrus. 14996

Dry root rot of citrus induced by ammonia excesses. 14998

Rapid indexing of exocortis in citrus. 15021

Failure of psorosis virus to protect against citrus variegation virus. 15028

Nitrogen as a factor in the development of exocortis of citrus. 15203

Interference with the biological control of cottony-cushion scale by insecticides and attempts to re-establish a favorable natural balance. 15224

Notice of filing of petition regarding pesticides. 15588

CLEANUP
The determination of pesticides in tissues with the electron capture detector without prior cleanup. 15578

CLIMATE
Seasonal shifts in the relative resistance to insect attack of eight commercial cabbage varieties. 15285

CLOSTRIDIUM CHAUVEI BACTERINS
Immunisation of sheep with multi-component clostridial vaccines. 15469

CLOSTRIDIUM MALACOSOMAE
Control of the eastern tent caterpillar, Malacosoma americanum (Fabricius), by distribution of spores of two species of Clostridium. 15226

CLOSTRIDIUM PERFRINGENS BACTERIN
Exterotoxemia of sheep. II. distribution of I131 radioiodinated serum albumin in brains of Clostridium perfringens type D intoxicated lambs. 15376

Exterotoxemia of sheep. I. Effects of Clostridium perfringens type D toxin on the brains of sheep and mice. 15377

Enterotoxemia of sheep. III. Clostridium perfringens type D antitoxin titers of normal, nonvaccinated lambs. 15378

CLOVER
Some clovers susceptible to the Cassia, cotton, and other wilt fusaria. 15005

Pathological anatomy of Sclerotinia trifoliorum on clover and alfalfa. 15639

COCCIDIOSIS
Results of continuous low-level inoculations with Eimeria bovis in calves. 15366

Cellular response to endogenous stages of Coccidia in cattle, with observations of the influence of chemicals upon the host-parasite relationship. 15509

COCCIDIOSTATS
The spectrophotofluorometric determination of buquinolate in poultry tissue and eggs. 15511

COCCINELLA
The effects of photoperiod, temperature, and food supply on rate of development and diapause in Coccinella novemnotata. 14916

COCHLIOMYIA HOMINIVORAX
Sexual sterilization of screw-worm flies by N,N'-tetramethylenebis(1-aziridinecarboxamide): influence of route of administration. 15501

Chemical structure and sterilizing activity of N,NO-alkylenebis-(1-aziridinecarboxamides) in screw-worm flies. 15605

COCONUTS
Internal spotting of coconuts. 15121

COLEOPTERA
Soil fauna research in the forest of Maures (Var). the dale of Fournel (Coleoptera). 14822

Leukosis - Transmission by beetles. 15311

COLLETOTRICHUM
Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

COLORIMETRY
Microconlometric gas chromatography analysis of selected herbicides in water. 15540

Simultaneons electron capture - microcoulometric detection for qualitative and quantitative pesticide analysis. (in: Gulf Coast Shellfish Sanitation Research Center. technical Memorandum (GCSSRC FY) 66 -2.). 15583

Extraction of the water with hexane followed by detection and assay using chromatographs equipped with electron capture and micro-coulometer detectors. 15600

COLOSTRUM
Studies on enteroviruses of the pig-V. the experimental disease induced in pathogen-free, colostrum-deprived pigs by the T80 and T52A strains of a swine polio-encephalomyelitis virus. 15327

COMPLEMENT FIXATION
Prodnction of foot-and-mouth disease virus with high complement-fixing antigenicity. 15428

Bovine babesiosis. the passive immunization of calves against Babesia argentina with special reference to the rcle cf complement fixing antibodies. 15517

Detection of common antigens of apple virns isolates by complement fixation. 15635

CONFERENCES
Water pollntion control and abatement. tD420.w45. 15548

CONIFERS
Colonization of shortleaf pine stnmps. 14990

CONJUNCTIVITIS
The isolation of infectious bovine rhinotrachetis virus from cattle affected with conjunctivitis-observations on the experimental infection. 15313

Conjnnctivitis in chickens caused by a typical infectious laryngotracheitis virns. 15450

CONOCEPHALUS NIGROPLEURUM
Tegminal amplifiers and spectrnm consistencies in Conocephalns nigroplenrum (Bruner), Tettigoniidae. 14925

COOPERIA PUNCTATA
Survival of infective larvae of the cattle nematodes, Cooperia pnnctata, Trichostrongylns axei, and Oesophagostomnm radiatnm. 15519

COPPER
Control of bacterial spot of peach. 15030

Accumnlation of copper by some Zambian plants. 15641

COREOIDEA
The morphology and higher classification of the Coreoidea (Hemiptera-Heteroptera). i-II. 14840

CORKY RINGSPOT (POTATOES)
Trichodorns christiei as a vector of potato corky ringspot (tobacco rattle) virns. 15273

CORN
Effect of s-triazine and phenylurea herbicides on soil fungi in corn- and soybean-cropped soil. 15093

The effect of corn root exndate on the growth of five fungi associated with corn roots. 15132

Use of polyethylene bags for corn root infection stndies. 15133

Relative effectiveness of resistance of field corn to the enropean corn borer, Pyrausta nubilalis, in crop protection and in population control. 15229

Effect of sngarcane borer infestation on the yield and grade of corn. 15233

Preliminary stndy on some of the factors affecting control of western corn rootworm larvae with soil insecticides. 15246

Effects of mulching and nitrogen on corn borer snscepti-bility in corn. 1524R

Effect of moisture content and length of storage period upon germination percentage of seeds of corn, wheat, and barley free of storage fungi. 15524

Comparison of field corn varieties for resistance to corn earworm and stored grain insect injury in the Everglades. 15530

Determination of Niagara NIA-10242 and its phenol degradation product in corn silage and milk and determination of other carbamates by GLC of their thiophosphoryl derivatives. 15552

Determination of linuron and its known and/or suspected metabolites in crop materials. 15566

CORTISONE
Effect of cortisone on Leptospira pomona infection in the guinea pig. 15302

CORYNEBACTERIUM
Microorganisms from the mid-gut of the larva of Tenebrio obscurus Fabricius. 14924

Population trends and movement of Corynebacterinm flaccumfaciens var. aurantiacum in tolerant and susceptible beans. 15172

COSMIC RAYS
Exposure of house flies and oriental rat fleas on a high-altitude balloon flight. 14962

COTTON
Spiders of the Arkansas cotton field. 14R15

Some clovers snsceptible to the Cassia, cotton, and other wilt fnsaria. 15005

Alternaria of cotton in Somalia. 15061

Evaluation of seed treatment with 1,4-dichloro-2,5-dimethoxybenzene as a cotton seedling disease control measure. 15158

Effect of pentachloronitrobenzene. 15178

Longevity of Xanthomonas malvacearum in dried cotton plants and its signicance in dissemination of the pathogen on seed. 15202

A fungus disease of the salt-marsh caterpillar in Arizona. 15253

Constituents of the cotton bnd. the carbonyl componnds. 15637

COTTONSEED
Notice of filing of petition regarding pesticides. 155R6

COUMAPROS
The control of poultry lice and mites with several organic incecticides. 1524U

Field tests with insecticides for control of lone star ticks on cattle. 15502

Comparative efficiency of coumaphos applications on various body areas by brush-on or pour-on for the control of cattle grubs. 15505

Cattle grub control with Bayer 21-199 in the Everglades. 15513

COVERED SMUT (BARLEY)
The effect of pericarp on covered smut infection of naked barley varieties. 15096

COWPEAS
Purification, serology, and properties of a new cowpea virus. 15103

Metabolite changes induced by cucumber mosaic virus in resistant and susceptible strains of cowpea. 15217

CRABAPPLES
Cankers of ornamental crabapples associated with Physalospora obtusa and other microorganisms. 15105

CRANBERRIES

CRANBERRIES
Bruising as a predisposing factor in the decay of stored cranberries. 15064

Investigations on Dursban insecticide. metabolism of O,O-diethyl O-3,5,6-trichloro-2-pyridyl phosphorothioate and 3,5,6-trichloro-2-pyridinol in plants. 15582

CRONARTIUM FUSIFORME
Antibiotic treatment of young loblolly pines infected with fusiform rust. 15050

CROP LOSSES
Loss in oats grown for forage in Texas due to occurrence of new races of crown rust. 15161

CROP ROTATION
Control of brown stem rot of soybeans with corn-soybean rotations. 15045

Fungi associated with Gladiolus roots under continuous cropping conditions. 15088

Seasonal variation in the incidence of radish yellows and effect of crop rotation on plant survival and yield. 15220

CROP VARIETIES
Effects of plant-bed applications of 2,6-dichloro-4-nitroaniline on control of sclerotial blight and on plant production in sweet potatoes. 15014

Maintaining virus-free cultivars of peach in Michigan. 15026

Seasonal fluctuations in susceptibility of young elm seedlings to Dutch elm disease. 15187

Comparison of field corn varieties for resistance to corn earworm and stored grain insect injury in the Everglades. 15530

Mortality of the San Jose scale (Homoptera: Diaspididae) on stored apples of different varieties and harvest dates. 15533

CROP YIELDS
Evidence of "running out" in non-certified potatoes used for seed. 15111

Control of the pickleworm on cucurbits. 15228

Effect of sugarcane borer infestation on the yield and grade of corn. 15233

CROPS
Determination of linuron and its known and/or suspected metabolites in crop materials. 15566

CROTYL BROMIDE
Fumigant toxicity of 1,2,3-tribromopropene, ethyleneimine, crotyl bromide and carbon tetrachloride to stored-product insects. 14888

CROWN ROT
Crown and root rots of alfalfa and red clover and the relative prevalence of associated fungi. 15007

CROWN RUST (OATS)
Loss in oats grown for forage in Texas due to occurrence of new races of crown rust. 15161

CUCUMBERS
A new fungus leaf spot disease of cucumber in western Washington. 15057

Control of cucumber scab due to Cladosporium cucumberinum. 15092

Protection of cucumber seedlings from stone fruit ringspot virus by 8-azaaguanine. 15099

Anthracnose, scab, and soil rot of cucumbers. 15131

Control of the pickleworm on cucurbits. 15228

CUE-LURE
Attraction of melon flies to lures on foliage or cane fibers at various heights. 14890

CULEX
The winter biology of Culex tarsalis (Diptera: Culicidae) in Kern county, California. 14837

Susceptibility of mosquitoes to silica gel insecticides. 14920

Experimental trasmission of African horse-sickness by means of mosquitoes. 15424

CULEX PIPIENS QUINQUEFASCIATUS
Biological activity of surfactants and some chemical intermediates against pre-imaginal mosquitoes. 14979

St. Louis encephalitis vector studies in Houston, Texas. 14983

CULICIDAE
Sampling studies with Aedes vexans and some other Wisconsin Aedes (Diptera: Culicidae). 14813

Effect of temperature, aeration, pH, and the presence of soil on the toxicity of various insecticides to mosquito larvae. 14817

Aedes (Verrallina) of the Papuan subregion (Diptera: Culicidae). 14825

The winter biology of Culex tarsalis (Diptera: Culicidae) in Kern county, California. 14837

Studies on the gonads of some immature mosquitoes. 14866

The effects of photoperiod and temperature on the induction of diapause in Aedes triseriatus (Say). 14900

Inhibition of metamorphosis and of ecdysis in mosquitoes. 14959

Relative susceptibility of salt-marsh mosquitoes from Georgia and Florida to insecticides. 14967

Failure to isolate microorganisms from within mosquito eggs. 14968

Mosquito control activities of the U.S. Armed Forces in the Republic of Vietnam. 14975

Laboratory observations of aedine mosquito oviposition (Diptbera, Culicidae, Aedes). 14976

Efficiency of granulated insecticides influenced by solvents used for impregnation. 14978

Panel: opposing philosophies in mosquito control technology: emphasis on control of adult mosquitoes in Florida. 14980

A preliminary report on a potential new mosquito control weapon. 14982

St. Louis encephalitis vector studies in Houston, Texas. 14983

Source reduction through water management. 14985

Preliminary report on the feeding pattern of two species of fish in a rice field habitat. 14988

Experimental trasmission of African horse-sickness by means of mosquitoes. 15424

The CDC Sweeper, a six volt mechanical aspirator for collecting adult mosquitoes. (abstract). 15685

CULTURAL CONTROL (PLANT DISEASES)
Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

CULTURE MEDIA
Failure to isolate microorganisms from within mosquito eggs. 14968

New medium for the isolation of Thielaviopsis basicola on dilution plates from soil and rhizosphere. 15150

Antibiotic mediums for the isolation of vibrios from bull semen. 15301

Cultivation of Mycoplasma of avian origin. 15314

The in vivo and in vitro isolation of avian encephalomyelitis virus (AEV). 15388

Synthesis and cytopathogenesis of African swine fever virus in porcine cell cultures. 15416

Isolation of Phytophthora megasperma var- sojae in soil dilution plates. 15623

Color formation on phenol-containing media as related to lignin breakdown by wood-rotting basidiomycetes. 15630

Some biochemical effects of alkylating agents. 15676

Technique for germinating uredospores of Puccinia striiformis. 15681

CUPRESSUS ARIZONICA
A study of symptoms and control of Phomopsis juniperovora on Arizona cypress. 15127

CURCULIONIDAE
Summer migration of the alfalfa weevil, Hypera postica (Coleoptera: Curculionidae). 14819

CURLY DWARF (ARTICHOKES)
Host range and properties of the globe artichoke curly dwarf virus. 15141

CURLY TOP (SUGAR BEETS)
Effect of virus yellows on yield and quality of sugar beet seed. 15080

CYCLOHEXIMIDE
Antibiotic treatment of young loblolly pines infected with fusiform rust. 15050

CYCLONEDA
Biology of the black cherry aphid in the Willamette Valley, Oregon. 15238

CYCLOPHOSPHAMIDE
Immune response to sheep erythrocytes with cytoxan and bybaroxia. 15465

CYMOPTERUS WATSONII
Experimental photosensitization by spring parsley (Cymopterus watsonii) in chicks. 15494

CYNODON DACTYLON
Results of chemical drenches in the control of spring dead spot of bermuda grass. 15212

CYTOCHROME OXIDASE
Evidence for functional cytochrome oxidase in tissues infected by obligate parasites. 15033

CYTOGENETICS
Cytogenetic alterations in swine kidney cells persistently infected with hog cholera virus and propagated with and without antiserum in the medium. 15437

CYTOLOGY
Cytologic changes induced by infectious canine hepatitis virus in tissue culture. 15443

Nuclear condition and division in vegetative bypbae of Rhizoctonia solani. 15644

C14
The glycerolipids of Mycoplasma mycoides. 15439

D, 2,4-
Microcoulometric gas chromatography analysis of selected herbicides in water. 15540

DACUS CUCURBITAE
Attraction of melon flies to lures on foliage or cane fibers at various heights. 14890

DAIRY CATTLE
Metabolism of TOK herbicide in dairy cow. 15564

DAIRY PRODUCTS
Study of modifications of the Mills procedure for chlorinated pesticides in dairy products. 15562

Rapid cleanup of dairy products for analysis of chlorinated insecticide residue by electron capture gas chromatography. 15568

DALAPON
Action and effectiveness of certain classes of herbicides. 15667

DDT
Susceptibility of mosquitoes to silica gel insecticides. 14920

Studies on fine-particle, coarse-particle, and concentrated aerosols. 14948

Relative susceptibility of salt-marsh mosquitoes from Georgia and Florida to insecticides. 14967

Development of DDT resistance in certain mayflies in New Brunswick. 14970

Soil treatments with insecticides for control of the eye gnats Hippelates collusor and H. hermsi. 14977

The influence of sublethal dosages of insecticides on the basal follicles of Aedes aegypti (L.). (abstract). 14986

Interference with the biological control of cottony-cushion scale by insecticides and attempts to re-establish a favorable natural balance. 15224

Safety of wildlife is important to planners of gnat-control program. 15239

The behavior of DDT and Zectran on a forest soil. 15544

Methods for extracting insecticides from soil. 15545

Extraction of chlorinated pesticide residues from nonfatty samples of low moisture content. 15550

DDT in humans and animals; determination of DDA in urine using an ion exchange resin. 15555

DDT reportedly discovered in antarctic seals and fish. 15563

Rapid cleanup of dairy products for analysis of chlorinated insecticide residue by electron capture gas chromatography. 15568

Determination of DOT and related substances in human fat. 15569

Metabolism of dDT and some other chlorinated organic compounds by Aerobacter aerogenes. 15571

Screening method for the detection of chlorinated hydrocarbon pesticide residues in the fat of milk, cheese, and butter. 15572

Loss of chlorinated hydrocarbon insecticides from soil surface in the field. 15573

The determination of pesticides in tissues with the electron capture detector without prior cleanup. 15578

Rapid screening method for DDT in milk with gas chromatography. 15580

DDT. proposed establishment of pesticide and food additive tolerances. 15592

DDT and related compounds in dog food and CSMA media used in insect rearing. 15611

Pesticides' unsung assistants. 15663

DEATH
Factors producing embryonic and fetal abnormalities, death, and abortion in swine. excerpts from the Symposium on Factors Producing Embryonic and Fetal Abnormalities, Death, and Abortion in Swine, sponsored by the National Academy of Science, U.s. livestock Sanitary Association, and Agricultural research service, U.s. department of agriculture. october 2-3, 1967, Chicago, Illinois. 15485

Toxicologic effects of a phosphorothioic acid insecticide in cattle. 15610

DEBEAKING

DEBEAKING
Hatchery spread of pullorum disease through debeaking. 15389

DECLINE (PEARS)
Pear decline virus transmission by pear Psylla. 15089

DECOLORIZING
A new bleaching technique with possible general use in entomology. 15686

DECOMPOSITION
Biological decomposition of herbicides in soil. i. mono-and trichloroacetate and dichloropropionate. 15543

Degradation of carbamate herbicides in soil. 15567

DEER
Studies in anaplasmosis. IV. Development of the causative agent in deer erythrocytes transfused into calves. 15398

Epizootic hemorrhagic disease in white-tailed deer- characteristic of the South Dakota strain of virus. 15436

DEFICIENCY DISEASES
Albicans infection in chickens. I. Effect of vitamin A nutritional factors influencing experimental Candida deficiency. 15393

Effects of vitamin-A deficiency and high-level chlortetracycline on experimental candidiasis of turkeys. 15479

DEFOLIATION
Gypsy moth defoliation. 15235

DEGRADATION
In vitro degradation of oxalate and of cellulose by rumen ingesta from sheep fed halogeton glomeratus. 15390

Determination of Niagara NIA-10242 and its phenol degradation product in corn silage and milk and determination of other carbamates by GLC of their thiophosphoryl derivatives. 15552

DEHYDROACETIC ACID
Chemicals for plant disease control. 15128

Polyethylene liners and fungicides for peaches and nectarines. 15526

DEHYDROGENASES
Transaminases and dehydrogenases in chicken plasma. 15678

DENDROCTONUS
Effectiveness of various formulations of five insecticides on insects infesting douglas-fir logs. 15250

DENDROCTONUS BREVICOMIS
Lindane in diesel oil prevents western pine beetle attacks for at least one year. 15251

DENDROCTONUS FRONTALIS
The biology and ecology of Dendroctonus valens Flec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans) Zimm in central Mexico (Coleopterai Scolytidae). 15165

DENDROCTONUS VALENS
The biology and ecology of Dendroctonus valens Flec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans) Zimm in central Mexico (Coleopterai Scolytidae). 15165

DENDROLIMUS SPECTABILIS
Interference between cytoplasmic-polyhedrosis viruses of the silkworm, Bombyx mori (Linnaeus), and of the pine caterpiller, Dendrolimus spectabilis (Butler). 14852

DENSITY
Buoyant density of African horsesickness virus. 15458

DEOXYRIBONUCLEIC ACID
Effect of interferon on early enzyme and viral DNA synthesis in vaccinia virus infection. 15401

DERMATITIS
Ingestion of Ammi visnaga seeds and photosensitization - The cause of vesicular dermatitis in fowls. 15478

DETERGENTS
Biological activity of surfactants and some chemical intermediates against pre-imaginal mosquitoes. 14979

DFA
Inhibition of metamorphosis and of ecdysis in mosquitoes. 14959

DIABROTICA
Several insects cause concern. 14991

DIABROTICA VIRGIFERA
Preliminary study on some of the factors affecting control of western corn rootworm larvae with soil insecticides. 15246

DIAGNOSIS
A slide smear technique for the diagnosis of laryngotracheitis. 15318

The detection of acute avian leukosis as a contagious disease. 15358

The diagnosis of equine infections anemia using the complement-fixation test, Siderocyte counts, hepatic biopsies, and serum protein alterations. 15385

A quick method for the diagnosis of avian pox and infections laryngotracheitis. 15463

DIANTHUS CARYOPHYLLUS
A survey of carnation diseases in south Sweden. 15144

DIAPAUSE
Effects of hormones and injury on RNA synthesis in saturniid moths. 14861

DIAPHANIA NITIDALIS
Control of the pickleworm on cucurbits. 15228

DIARRHEA
Treatment of diarrhoea in dogs. 15380

Persistent diarrhoea and vitamin B in the horse. 15418

Clinical management of neonatal diarrhea in calves, with special reference to pathogenisis and diagnosis. 15447

Pathogenis and prevention of infectious diarrhea (scours) of newborn calves. 15452

DIATRAEA
Effect of sugarcane borer infestation on the yield and grade of corn. 15233

DIAZINON
Effect of temperature, aeration, pH, and the presence of soil on the toxicity of various insecticides to mosquito larvae. 14817

DIBROMO-3-CHLOROPROPANE, 1,2-
Soil fumigation by injection and irrigation for the control of nematodes on hops. 15261

Control of nematodes on blue spruce. 15263

Tolerances of Picea SPP to a nematocide. 15636

DICAMBA
Dicamba and its metabolite. notice of establishment of temporary tolerance. 15591

Action and effectiveness of certain classes of herbicides. 15667

DICAPTHON
The control of poultry lice and mites with several organic incecticides. 15240

A sensitive procedure for urinary p-nitrophenol determination as a measure of exposure to parathion. 15559

DICHLORO-2,5-DIMETHOXYBENZENE, 1,4-
Evaluation of seed treatment with 1,4-dichloro-2,5-dimethoxybenzene as a cotton seedling disease control measure. 15158

DICHLORO-4-NITROANILINE, 2,6-
Effects of plant-bed applications of 2,6-dichloro-4-nitroaniline on control of sclerotial blight and on plant production in sweet potatoes. 15014

DICHLORO-4'-AMINODIPHENYL ETHER, 2,4-
Metabolism of TOK herbicide in dairy cow. 15564

DICHLORO-4'-NITRODIPHENYL ETHER, 2,4-
Metabolism of TOK herbicide in dairy cow. 15564

DICHLOROPROPIONATE
Biological decomposition of herbicides in soil. i. mono-and trichloroacetate and dichloropropionate. 15543

DICOFOL
Three plans for using acaricides to control mites on apple. 15223

Food additives permitted in food for human consumption. 1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethanol. 15594

DDT and related compounds in dog food and CSMA media used in insect rearing. 15611

DICTYOCAULAS VIVIPARUS
Studies on infection and immunity with the lungworm, Dictyocaulas viviparus (Bloch). i. active immunization of guinea pigs and rabbits. 15488

DIEBACK (ULMUS)
Effect of Dutch elm disease on seedling elms. 15004

Seasonal fluctuations in susceptibility of young elm seedlings to Dutch elm disease. 15187

Scotylid vectors of the Dutch elm disease in Ontario. 15214

An adenosine triphosphate-binding substance from Ceratocystis ulmi. 15632

DIELDRIN
The influence of sublethal dosages of insecticides on the basal follicles of Aedes aegypti (L.). (abstract). 14986

Extraction of chlorinated pesticide residues from nonfatty samples of low moisture content. 15550

Study of modifications of the Mills procedure for chlorinated pesticides in dairy products. 15562

Rapid cleanup of dairy products for analysis of chlorinated insecticide residue by electron capture gas chromatography. 15568

Metabolism of dDT and some other chlorinated organic compounds by Aerobacter aerogenes. 15571

Screening method for the detection of chlorinated hydrocarbon pesticide residues in the fat of milk, cheese, and butter. 15572

The determination of pesticides in tissues with the electron capture detector without prior cleanup. 15578

Semi-automatic extraction of organic materials from water. public Health Service Water Pollution Surveillance System Applications and Development Report 16. 15665

DIESEL FUELS
A preliminary report on a potential new mosquito control weapon. 14982

Lindane in diesel oil prevents western pine beetle attacks for at least one year. 15251

DIET
Control of chronic respiratory disease. II. The effect of low calcium diet, terephthallic acid and chlortetracycline. 15383

DIETHYL O3,5,6-TRICHLORO-2-PYRIDYL PHOSPHOROTHIOATE, O,O-
Investigations on Dursban insecticide. metabolism of O,O-diethyl O-3,5,6-trichloro-2-pyridyl phosphorothioate and 3,5,6-trichloro-2-pyridinol in plants. 15582

DIETHYLSTILBESTROL
Fecal elimination of estrogens by cattle treated with diethylstilbestrol and hexestrol. 15290

Effect of diet on aortic ruptures in turkeys induced by diethylstilbestrol. 15304

Notice of filing of petition for food additives. 15482

DIFOLATAN
Control of cucumber scab due to Cladosporium cucumberinum. 15092

DIGITARIA
Determination of linuron and its known and/or suspected metabolites in crop materials. 15566

DIMETHOATE
Chemotherapeutic control of a root-knot nematode. 15258

Mammalian detoxification of insecticides. 15602

DIMETHYL SULFOXIDE
Analysis of chlorinated pesticide residues in fats and oils, utilizing dimethyl sulfoxide: a collaborative study. 15558

DINITROBUTYLPHENOL
Action and effectiveness of certain classes of herbicides. 15667

DINITROCRESOL
A sensitive procedure for urinary p-nitrophenol determination as a measure of exposure to parathion. 15559

DIOXATHION
Field tests with insecticides for control of lone star ticks on cattle. 15502

DIPHENYLAMINE
Influence of pre-storage treatments on the mortality of the San Jose scale (Homoptera: Diaspididae) on apples held in storage. 15532

DIPPING
Analysis of Dursban in livestock dips and sprays. 15658

DIPRIONIDAE
Parasites of the red-pine sawfly, Neodiprion nanulus nanulus (Hymenoptera: Diprionidae), in New Brunswick. 14844

Candling and sighting techniques used in laser investigations of the European pine sawfly, Neodiprion sertifer (Hymenoptera: Diprionidae). 14902

DIPTERA
New technique for preparation and study of moth flies. 14908

Safety of wildlife is important to planners of gnat-control program. 15239

DIQUAT
Action and effectiveness of certain classes of herbicides. 15667

DISEASE TRANSMISSION
Transmission of some insect viruses with particular reference to ovarial transmission and its importance in the development of epizootics. 14862

DISEASES
Biology of vector-associated diseases in Vietnam. 15460

DISODIUM OCTOBORATE TETRAHYDRATE
Feed additives for control of house fly larvae in livestock feces. 15503

DISULFOTON
Reduction of aster yellows. 15053

DITHANE M-45
Control of cucumber scab due to Cladosporium cucumberinum. 15092

DIURNAL RHYTHM
The importance of locomotor activity in circadian systems. 14909

The effect of circadian rhythm on the development of Drosophila. 14941

DODINE
Dodine (Cyprex) effective against bacterial spot of peach. 15032

DOG FOODS

DOG FOODS
DDT and related compounds in dog food and CSMA media used in insect rearing. 15611

DOGS
The position of the canine prostrate gland. 15294

The ages at which the centers of ossification appear roentgenographically in the limb bones of the dog. 15295

Detection of leptospires in naturally infected dogs, using fluorescein-labeled antibodies. 15309

A quantitative measurement of the blood loss caused by ancylostomiasis in dogs. 15341

Calcium gout (Kalkgicht) and calcinosis circumscripta in dogs. 15345

Treatment of diarrhoea in dogs. 15380

Neoplasms of the canine and feline urinary bladder: Clinical findings, diagnosis, and treatment. 15423

Spontaneous abnormal cardiac arrhythmias and conduction disturbances in the dog. A clinical and pathologic study of 3,000 dogs. 15427

Clinical experiences with lincomycin--a new antibiotic. 15440

A coccidia-like organism associated with subcutaneous granulomata in a dog. 15464

Chemical ovicidal measures as applied to Taenia hydatigena, Taenia ovis, Taenia pisiformis, and Echinococcus granulosus. 15516

DOSAGE
Effects of plant-bed applications of 2,6-dichloro-4-nitroaniline on control of sclerotial blight and on plant production in sweet potatoes. 15014

DOWICIDE B
Control of diseases of shallots. 15521

DOWNY MILDEW
Resistance of Brassica oleracea varieties to downy mildew. 15142

DOWNY MILDEW (LIMA BEANS)
Sporulation of Phytophthora phaseoli. 15086

Forecasting downy mildew of lima bean in Cape May County, New Jersey. 15087

Evidence for a chemical basis of resistance of lima bean plants to downy mildew. 15206

The occurrence and decline of downy mildew on lima beans in the Middle Atlantic states. 15215

Transmission of downy mildew of lima beans by slugs. 15218

DROSOPHILA
The effect of circadian rhythm on the development of Drosophila. 14941

DROSOPHILA MELANOGASTER
Dynamics of populations. II. factors controlling population growth and population size in Drosophila pseudoobscura and in Drosophila melanogaster. 14803

Stimuli provided by courtship of male Drosophila melanogaster. 14859

DROSOPHILA PSEUDOOBSCURA
Dynamics of populations. II. factors controlling population growth and population size in Drosophila pseudoobscura and in Drosophila melanogaster. 14803

DRUG THERAPY
Chemotherapeutic control of a root-knot nematode. 15258

Treatment of chronic respiratory disease with tylosin. 15321

Treatment of experimental infectious sinusitis of turkeys with erythromycin. 15322

The chemotherapy of experimental babesiasis in mice and splenectomized calves. 15402

The therapeutic value of terramycin-TPA on CBD. 15491

DRUGS
Viruses, serums, toxins, and analagous products. notice of extension of time to submit written data, views, or arguments. 15481

Selective residue determination of sulfur-, halogen-, and phosphorus-containing pesticides by helium-plasma emission spectrometry. 15656

Plasma enzyme levels in chickens, a measure of drug induced pathology. 15677

DRY ROT (WINTER SQUASH)
A dry rot of acorn squash, Cucurbita pepo. L. 15040

DUCKLINGS
Eastern encephalitis in white Pekin ducklings on long island. 15356

DUCKS
A modified microgel diffusion method and its application in the study of the virus of duck hepatitis. 15417

Studies on Pasteurella anatipestifer infection in white Pekin ducks. 15441

DURSBAN
Cross-tolerance of California Aedes nigromaculis (Ludlow) larvae to EPN, Abate, and Dursban. (abstract). 14973

Evaluation of thermal and nonthermal fogs against four species of mosquitoes. (abstract). 14987

Analysis of Dursban in livestock dips and sprays. 15658

DUSTING
Dust containing Bacillus thuringiensis for control of chicken body, shaft, and wing lice. 15504

DYRENE
Organic fungicides for control of pecan scab. 15013

EASTERN EQUINE ENCEPHALOMYELITIS
Eastern encephalitis in white Pekin ducklings on long island. 15356

EASTERN EQUINE ENCEPHALOMYELITIS VIRUS
Relationships between eastern and western equine encephalomyelitis viruses as demonstrated by the hemagglutination-inhibition antibody response of experimentally infeced chickens. 15419

ECHINOCOCCUS GRANULOSUS
Chemical ovicidal measures as applied to Taenia hydatigena, Taenia ovis, Taenia pisiformis, and Echinococcus granulosus. 15516

ECITON
Chemical releases of social behavior-IV. The hindgut as the source of the odor trail pheromone in the neotropical army ant genus Eciton. 14807

ECOLOGY
Population ecology and pest control. 14993

Survival of infective larvae of the cattle nematodes, Cooperia punctata, Trichostrongylus axei, and Oesophagostomum radiatum. 15519

ECONOMIC PLANTS
Further additions to the list of fungus pathogens recorded in Chile. 15145

EDEMA
Pigweed (Amaranthus retroflexus). an oxalate-containing plant. 15404

Demonstrable antigens and a toxic factor in Oedema disease of swine. 15473

EDEMA DISEASE
Studies on hemolytic Escherichia coli associated with edema disease of swine. I. Separation and properties of a toxin of hemolytic Escherichia coli. 15351

EGGS
Some factors affecting Rous sarcoma virus activity in the embryonated egg inoculated by the yolk - sac route. 15420

Detection and identification of salmonella from dried whole egg, dried egg yolk, and dried egg white: report of a collaborative study. 15537

Method for residues of Zytron, O-2,4-dichlorophenyl O-methyl isopropylphosphoramidothioate, in chicken tissues and eggs. 15565

ELATERIDAE
Soil treatments with broadcast or hand applications of organophosphorous or carbamate insecticides for prevention of wireworm damage to potatoes. 15227

ELECTRON CAPTURE
The determination of pesticides in tissues with the electron capture detector without prior cleanup. 15578

Simultaneous electron capture - microcoulometric detection for qualitative and quantitative pesticide analysis. (in: Gulf Coast Shellfish Sanitation Research Center. technical Memorandum (GCSSRC FY) 66 -2.). 15583

Extraction of the water with hexane followed by detection and assay using chromatographs equipped with electron capture and micro-coulometer detectors. 15600

ELECTRON MICROSCOPY
Notes: Electron microscopic investigation of sacbrood of the honey bee. 14865

Electron microscopy of the bovine heart in congestive failure of high mountain disease. 15361

Electron microscopy of Anaplasma marginale in the bovine erythrocyte. 15461

Electron microscopy of infectious canine hepatitis virus grown in cultures of canine kidney cells. 15475

Electron microscopy of equine abortion virus. 15476

ELECTROPHORESIS
Chemical and electrophoretic studies of the serums of cattle infected naturally with Asia-1 type foot-and-mouth disease virus. 15431

EMBRYOLOGY
Energy sources during embryogenesis of the yellow mealworm, Tenebrio molitor. 14938

ENATION MOSAIC (PEAS)
The ribonucleic acids of leaves and pods of peas infected with pea enation mosaic virus. 15017

Purification of pea enation mosaic virus. 15067

ENDOCONIDIOPHORA PARADOXA
Storage and germination of cuttings and soil microorganisms as they relate to the pineapple disease of sugar cane. 15016

ENDOSULFAN
Effectiveness of various formulations of five insecticides on insects infesting douglas-fir logs. 15250

ENDRIN
Effect of sugarcane borer infestation on the yield and grade of corn. 15233

Effectiveness of various formulations of five insecticides on insects infesting douglas-fir logs. 15250

Methods for extracting insecticides from soil. 15545

Rapid cleanup of dairy products for analysis of chlorinated insecticide residue by electron capture gas chromatography. 15568

Loss of chlorinated hydrocarbon insecticides from soil surface in the field. 15573

Lethal endrin concentration in the blood of gizzard shad. 15603

Semi-automatic extraction of organic materials from water. public Health Service Water Pollution Surveillance System Applications and Development Report 16. 15665

ENGLAND
Pathogenicity of isolates of the bean wilt Fusarium from England and the United States. 15006

ENTERITIS
Lymphosarcoma in the rabbit. a case report and general review. 15487

ENTEROTOXEMIA
Exterotoxemia of sheep. II. distribution of I131 radioiodinated serum albumin in brains of Clostridium perfringens type D intoxicated lambs. 15376

Exterotoxemia of sheep. I. Effects of Clostridium perfringens type D toxin on the brains of sheep and mice. 15377

ENTEROVIRUSES
Studies on enteroviruses of the pig-V. the experimental disease induced in pathogen-free, colostrum-deprived pigs by the T80 and T52A strains of a swine polioencephalomyelitis virus. 15327

Studies on the enteroviruses of the pig-IV. the isolation in tissue culture of a possible enteric cytopathogenic swine orphan (ECHO) virus (V13) from the feces of a pig. 15399

ENTOMOGENOUS FUNGI
Pathogenicity of different strains of Entomophthora coronata (Costantin) Kevorkian for larvae of the greater wax moth. 14935

Spicaria rileyi (Farlow) Charles, an entomogenous fungus of Trichoplusia ni Huebner). 15237

ENTOMOPHTHORA CORONATA
Pathogenicity of different strains of Entomophthora coronata (Costantin) Kevorkian for larvae of the greater wax moth. 14935

ENZYMES
Lysozyme-like action of enzymes from the cockroach Periplaneta americana and from some other sources. 14934

Analysis of proteins and enzymes of the interaction between Phaseolus vulgaris and Pseudomonas phaseolicola (halo blight of beans). 15642

Some biochemical effects of alkylating agents. 15676

Plasma enzyme levels in chickens, a measure of drug induced pathology. 15677

EPHEDRUS
Biology of the black cherry aphid in the Willamette Valley, oregon. 15238

EPHEMEROPTERA
The subimaginal cuticle of the mayfly Callibaetis sp. (Ephemeroptera). 14942

Development of DDT resistance in certain mayflies in New Brunswick. 14970

EPIDEMIOLOGY
Stemphylium ray speck of chrysanthemum. 15195

EPIZOOTIC DISEASES
Transmission of some insect viruses with particular reference to ovarial transmission and its importance in the development of epizootics. 14862

The epizootiology of virus diseases in field populations of the armyworm, Pseudaletia unipuncta (Haworth). 14964

Report on the pullorum disease testing results for the 32nd northeastern conference on avian diseases. 15312

Case report- An outbreak of ornithosis in New Mexico. 15367

Transmission of chronic respiratory disease in chickens. 15422

An epizootic of histiocytic sarcomas in chickens induced by a cell-free agent. 15430

Epizootic hemorrhagic disease in white-tailed deer- characteristic of the South Dakota strain of virus. 15436

EPN

EPN
Cross-tolerance of California Aedes nigromaculis (Ludlow) larvae to EPN, Abate, and Dursban. (abstract). 14973

Efficiency of granulated insecticides influenced by solvents used for impregnation. 14978

EPTC
Uptake of radioactive ethyl NN-DI-N-PROPYLTHIOCARBAMATE (EPTC-35 S) and translocation of sulphur-35 in various crops. 14992

EQUINE ENCEPHALOMYELITIS
Viral encephalomyelitis of equines and domestic ruminants in the Near East. i. 15350

EQUINE RHINOPNEUMONITIS
Electron microscopy of equine abortion virus. 15476

EQUIPMENT
Dust containing Bacillus thuringiensis for control of chicken body, shaft, and wing lice. 15504

Semi-automatic extraction of organic materials from water. public Health Service Water Pollution Surveillance System Applications and Development Report 16. 15665

A vapor trapping apparatus for determining the loss of EPTC and other herbicides from soils. 15684

ERWINIA AMYLOVORA
Beta-glucosidase activity in Erwinia amylovora and Pseudomonas syringae. 15171

Filament form of Erwinia amylovora. 15211

ERYSIPHE
Genetics of resistance to Erysiphe polygoni in Trifolium pratense. 15193

ERYTHROCYTE SEDIMENTATION REACTION
Studies on the erythrocyte sedimentation rate in domestic animals. VII. Bouleau formation. 15303

ERYTHROCYTES
Erythrocyte survival studies in domestic and bighorn sheep, using glycine-2-C14. 15299

Erythrocyte survival in experimental anaplasmosis. 15319

Studies in anaplasmosis. IV. Development of the causative agent in deer erythrocytes transfused into calves. 15398

Immune response to sheep erythrocytes with cytoxan and hybaroxia. 15465

Correlation of the effects of parathion on erythrocyte cholinesterase with symptomatology in pigs. 15574

ERYTHROMYCIN
Treatment of experimental infectious sinusitis of turkeys with erythromycin. 15322

Food additives permitted in the feed and drinking water of animals of for the treatment of food-producing animals. food additives permitted in food for human consumption. erythromycin. 15484

ESCHERICHIA
Clinical management of neonatal diarrhea in calves, with special reference to pathogenisis and diagnosis. 15447

Pathogenis and prevention of infectious diarrhea (scours) of newborn calves. 15452

ESERINE
Induction of scintillation in the firefly. 14870

ESTERASES
Esterases of crystalliferous bacteria pathogenic for insects: epizootiological applications. 14929

ESTIGMENE
A fungus disease of the salt-marsh caterpillar in Arizona. 15253

ETRION
Food additives permitted in food for human consumption. Ethion. 15595

ETHIONINE
Systemic and fungicidal activity of D-, L-, and DL-ethionine, S-alkyl-DL-HOMOCYSTEIN derivatives, and methionine antagonists. 15138

ETHNOLOGY
Oat smut races of the South Atlantic States. 15115

ETHOXYQUIN
Influence of pre-storage treatments on the mortality of the San Jose scale (Homoptera: Diaspididae) on apples held in storage. 15532

ETHYL NN -DI-N-PROPYLTHIOCARBAMATE
Uptake of radioactive ethyl NN-DI-N-PROPYLTHIOCARBAMATE (EPTC-35 S) and translocation of sulphur-35 in various crops. 14992

ETHYL METHANESULFONATE
Varying the EMS effect on barley by changing the various treatment and postwashing temperatures. 15614

Induced polygenic mutations in hexaploid wheats. 15621

ETHYLENE DIBROMIDE
The biology and ecology of Dendroctonus valens Lec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans) Zimm in central Mexico (Coleopterai Scolytidae). 15165

ETHYLENIMINE
Fumigant toxicity of 1,2,3-tribromopropene, ethyleneimine, crotyl bromide and carbon tetrachloride to stored-product insects. 14888

ETIOLOGY
The etiology of legume bloat-nonvolatile acids. 15457

EUROPE
Pesticide safety and use in Europe. 15695

EUROPEAN FOULBROOD
The pathogenicity for honey-bee larvae of microorganisms associated with European foulbrood. 14855

EXCRETA
Fecal elimination of estrogens by cattle treated with diethylstilbestrol and hexestrol. 15290

EXOBASIDIUM VEXANS
Epidemiology of tea blister blight (Exobasidium vexans). iii. Spore deposition and disease prediction. 15095

EXOCORTIS (CITRUS)
Rapid indexing of exocortis in citrus. 15021

Nitrogen as a factor in the development of exocortis of citrus. 15203

EXTENSION WORK
1967 insecticide recommendations; peach insect control (commercial). 15225

EXTRACELLULAR SUBSTANCES
Failure to confirm the synthesis of TMV in a cellfree system. 15208

EXTREMITIES
The ages at which the centers of ossification appear roentgenographically in the limb bones of the dog. 15295

EXUDATES
The effect of corn root exudate on the growth of five fungi associated with corn roots. 15132

FACIAL ECZEMA
Some observations on field cases of facial eczema: liver pathology and determination of serum bilirubin, cholesterol, transaminase and alkaline phosphatase. 15354

FANLEAF (GRAPES)
Inoculation of etiolated but light-treated leaves of grape with fanleaf virus. 15079

FARMERS
Opportunities and challenges are ahead for fertilizer industry. 15694

FARMS
Case report- botulism type C outbreak on a pheasant game farm. 15486

FARNESOIC ACID
Inhibition of metamorphosis and of ecdysis in mosquitoes. 14959

FASCIOLA HEPATICA
Pharmacology and toxicology of carbon tetrachloride in the sheep. iV. reduction and augmentation of toxicity to sheep. 15397

FATS
Toxicity of topically applied fats and oils. 15520

Analysis of chlorinated pesticide residues in fats and oils, utilizing dimethyl sulfoxide: a collaborative study. 15558

FECES
Fecal elimination of estrogens by cattle treated with diethylstilbestrol and hexestrol. 15290

Feed additives for control of house fly larvae in livestock feces. 15503

FEED
The problem of Salmonella organisms in animal by-products and feeds. 15360

Ingestion of Ammi visnaga seeds and photosensitization - The cause of vesicular dermatitis in fowls. 15478

A survey to determine the salmonella contamination rate in livestock and poultry feeds. 15535

Extraction of chlorinated pesticide residues from nonfatty samples of low moisture content. 15550

FEED ADDITIVES
Notice of filing of petition for food additives. 15482

Notice of filing of petition for food additive biuret. 15483

Food additives permitted in the feed and drinking water of animals of for the treatment of food-producing animals. food additives permitted in food for human consumption. erythromycin. 15484

Feed additives for control of house fly larvae in livestock feces. 15503

Food additives permitted in feed and drinking water of animals or for the treatment of food-producing animals. food additives permitted in food for human consumption. thiabendazole. 15596

FEEDING
Mosquitoes feeding on a frog. 14868

Some problems associated with weighing aphids that have fed after starving, as a method of measuring intake of plant sap. 14943

FENTHION
Attraction of melon flies to lures on foliage or cane fibers at various heights. 14890

Insecticidal and natualistic control chironomid larvae in Lake Dalwigk, Vallejo, California. 14919

FENURON
Action and effectiveness of certain classes of herbicides. 15667

FERMENTATION
Eradication of soil fungi by a combination of crop residue, flooding, and anaerobic fermentation. 15213

FERTILITY
Fecundity, longevity, and transinfectivity of citrus red mites (Panonychus citri) infected with a noninclusion virus. 14883

Phenotypic restoration of fertility in a male-sterile mutant by treatment with gibberellic acid. 15629

FERTILIZERS
Effects of light, temperature, and fertilizer on infection of wheat leaves by Septoria tritici. 15047

Phosphorus fertilization and the phytotoxicity of simazine. 15613

Opportunities and challenges are ahead for fertilizer industry. 15694

FETAL DEATH
Factors producing embryonic and fetal abnormalities, death, and abortion in swine. excerpts from the Symposium on Factors Producing Embryonic and Fetal Abnormalities, Death, and Abortion in Swine, sponsored by the National Academy of Science, U.S. livestock Sanitary Association, and Agricultural research service, U.S. department of agriculture. october 2-3, 1967, Chicago, Illinois. 15485

FIBERBOARD
Escape of methyl bromide through wallboards. 15581

FIELD CROPS
Notice of filing of petition regarding pesticides. 15587

FIELD MICE
Natural occurrence of leptospirosis in the meadow vole, Microtus pennsylvanicus. 15343

FIGS
Note on identification of azinphosmethyl in human tissues. and in figs. 15579

FILTER PAPER
Note on staining as an aid in counting vinegar eelworms in vinegar. 15534

FIRE BLIGHT (PEARS)
Longevity of the fire blight organism, Erwinia amylovora on pear trees in the greenhouse as demonstrated by infection after sandblast injury. 14901

Tree nutrition and fire blight development. 15151

FISH
Insecticidal and natualistic control chironomid larvae in Lake Dalwigk, Vallejo, California. 14919

Preliminary report on the feeding pattern of two species of fish in a rice field habitat. 14988

Fish, wildlife unaffected by boll weevil program. 15557

Notice of filing of petition for food additive oxytetracycline. 15585

Lethal endrin concentration in the blood of gizzard shad. 15603

FISHKILL
Infrared identification of chlorinated insecticides in the tissues of poisoned fish. 15553

Lethal endrin concentration in the blood of gizzard shad. 15603

FLEAHOPPERS
Several insects cause concern. 14991

FLOCCULATION
Detection of potato virus X in tubers by the bentonite flocculation test. 15175

FLOODS
Eradication of soil fungi by a combination of crop residue, flooding, and anaerobic fermentation. 15213

FLORIDA
Relative susceptibility of salt-marsh mosquitoes from Georgia and Florida to insecticides. 14967

Panel: opposing philosophies in mosquito control technology: emphasis on control of adult mosquitoes in Florida. 14980

Cattle grub control with Bayer 21-199 in the Everglades. 15513

FLODR

FLOUR
Quinoid secretions in grain and flour beetles. 15531

FLUORENAMINE
Notes: Effect of certain carcinogenic 2-fluorenamine derivatives on larvae of the house fly, Musca domestica Linnaeus. 14952

FLUORESCENT ANTIBODY TECHNIC
Demonstration of nuclear polyhedrosis in Bombyx mori (Linnaeus) by fluorescent antibody technique. 14903

FLUORESCENT SUBSTANCES
Accumulation of fluorescent compounds in tobacco associated with tobacco mosaic virus hypersensitivity. 15D72

FLUORIDES
Effects of fluoride on magnesium deficiency in the guinea pig. 15446

FLUORINE
Vertebral biopsy in cattle. 15445

FOLPET
Control of cucumber scab due to Cladosporium cucumberinum. 15092

Relation between residues of folpet and control of brown rot on sour cherry fruit in Door County, Wisconsin, 1962. 15137

FOOD ADDITIVES
Notice of filing of petition for food additive oxytetracycline. 15585

Notice of withdrawal of petition for food additives. 15590

DDT. proposed establishment of pesticide and food additive tolerances. 15592

Food additives permitted in food for human consumption. 1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethanol. 15594

Food additives permitted in food for human consumption. Ethion. 15595

Food additives permitted in feed and drinking water of animals or for the treatment of food-producing animals. food additives permitted in food for human consumption. thiabendazole. 15596

FOOD ANALYSIS
Extraction of the water with hexane followed by detection and assay using chromatographs equipped with electron capture and micro-cculometer detectors. 15600

FOOD CONTAMINATION
Food additives permitted in the feed and drinking water of animals of for the treatment of food-producing animals. food additives permitted in food for human consumption. erythromycin. 15484

Note on staining as an aid in counting vinegar eelworms in vinegar. 15534

A survey to determine the salmonella contamination rate in livestock and poultry feeds. 15535

Detection and identification of salmonella from dried whole egg, dried egg yolk, and dried egg white: report of a collaborative study. 15537

Rapid cleanup of dairy products for analysis of chlorinated insecticide residue by electron capture gas chromatography. 15568

Simple ultrasensitive test for detecting penicillin in milk. 15575

Rapid screening method for DDT in milk with gas chromatography. 15580

Simultaneous electron capture - microcoulometric detection for qualitative and quantitative pesticide analysis. (in: Gulf Coast Shellfish Sanitation Research Center. technical Memorandum (GCSSRC PY) 66 -2.). 15583

Notice of filing of petition for food additive oxytetracycline. 15585

Food and food products. tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. O-Phenylphenol and its sodium salt. 15593

Food additives permitted in food for human consumption. 1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethanol. 15594

Notice of filing of petition regarding pesticides. 15597

Notice of filing of petition regarding pesticides. 15599

Extraction of the water with hexane followed by detection and assay using chromatographs equipped with electron capture and micro-coulometer detectors. 15600

DDT and related compounds in dog food and CSMA media used in insect rearing. 15611

FOOD STORAGE
Effect of moisture content and length of storage period upon germination percentage of seeds of corn, wheat, and barley free of storage fungi. 15524

FOOT-AND-MOUTH DISEASE VIRUS
Foot-and-mouth disease virus- its behavior in cattle after serial passages in chicken embryos and chicks. 15352

Production of foot-and-mouth disease virus with high complement-fixing antigenicity. 15428

Chemical and electrophoretic studies of the serums of cattle infected naturally with Asia-1 type foot-and-mouth disease virus. 15431

Foot-and-mouth disease virus. II. Propagation and modification of 3 immunologic types of virus in embryonating chicken eggs. 15498

Foot-and-month disease virus. I. Propagation of 3 immunologic types of virus in chicks. 15499

FORAGE PLANTS
Species of Leptosphaerulina on forage plants. 15063

Loss in oats grown for forage in Texas due to occurrence of new races of crown rust. 15161

FORECASTING
Epidemiology of tea blister blight (Exobasidium vexans). iII. Spore deposition and disease prediction. 15095

FOREIGN TRADE
Pesticide safety and use in Europe. 15695

FOREST INSECTS
Soil fauna research in the forest of Maures (Var). the dale of Fournel (Coleoptera). 14822

Distribution of bidrin in the foliage of treated trees. 15230

Bark beetle mortality in precommercial herbicide thinnings of western hemlock. 15245

Lindane in diesel oil prevents western pine beetle attacks for at least one year. 15251

Late-season control of European elm scale with bidrin trunk injections. 15612

FOREST NURSERIES
Potential pathogenicity of Pythium isolates from forest nurseries. 15204

FOREST SOILS
The behavior of insecticides in forest soils. 15539

The behavior of DDT and Zectran on a forest soil. 15544

FORESTS
Determination of Zectran residues in aerial forest spraying. 15576

FORMALDEHYDE
The effectiveness of formalin in controlling jaundice (nuclear polyhedrosis) of the silkworm in Poland. 14885

FORMICIDAE
Constituents of Dufour's gland in Myrmecia gulosa. 14872

FORMULATIONS
Analysis of Durshan in livestock dips and sprays. 15658

Pesticides' unsung assistants. 15663

FOWL CHOLERA
Atypical Pasteurella infections in chickens. 15342

Studies on pasteurellosis. IV. killed fowl cholera vaccine absorbed on aluminum hydroxide. 15381

Studies on pasteurellosis. III. Control of experimental fowl cholera in chickens and turkeys with an emulsified killed vaccine. 15382

An unusual aspect of Pasteurella pseudotuberculosis in turkeys. 15395

Studies on Pasteurella anatipestifer infection in white Pekin ducks. 15441

FOWLPOX
Experience with fowl pox vaccination. 15470

FRANCE
Contribution to the study of ovine listeriosis and immunoprophylaxis against the disease in France. 15414

FROGS
Mosquitoes feeding on a frog. 14868

FRUIT
Plant-to-plant transfer of stone fruit ringspot virus in squash by pollination. 15035

Ceratocystis canker of stone fruit trees. 15037

Residue studies of tomato foliage and fruits from plants receiving PEBC- C14 pre-or post-emergence. 15560

FUMARIC ACID
Role of fumaric acid in the hull rot disease of almond. 15136

FUMIGANTS
The efficacy of various fumigants in controlling Verticillium wilt in south-central Washington. 15184

FUMIGATION
Effect of storage environment on quality of table grapes and on requirements of sulfur dioxide fumigation program. 15527

FUNGI
Colonization of shortleaf pine stumps. 14990

Severity and distribution of cotton boll rot as related to temperature. 15070

Fungi associated with larvae of Sitona spp. 15097

Comparison pathogenicity studies of fungi associated with corn stalk rot. 15152

Control of the eastern tent caterpillar, Malacosoma americanum (Fabricius), by distribution of spores of two species of Clostridium. 15226

Prevention of photodynamic killing of fungal cells by carotenoids. 15620

Light absorption by living mycelia of fungi before and after exposure to near-ultraviolet radiation. 15633

Effect of certain fungi on the growth of dwarf tomatoes in gnotobiotic conditions. 15634

Control of pathogenic fungi, nematodes, and weeds by preplanting chemical treatments. 15640

Pectin trans-eliminase and polygalacturonase production by Rhizoctonia solani and other fungi. 15645

Effects of surfactants on fungi. 15647

Fixation of HC14N by fungi. 15649

FUNGICIDES
An evaluation of certain fungicide - adjuvant combinations for control of pecan scab. 15012

Effects of plant-bed applications of 2,6-dichloro-4-nitroaniline on control of sclerotial blight and on plant production in sweet potatoes. 15014

An evaluation of two fungicides as soil treatments with and without herbicide for tomato fruit control. 15029

Antibiotic treatment of young loblolly pines infected with fusiform rust. 15050

Control of Verticillium wilt of peppermint by soil fumigation in muck soil. 15065

Control of asparagus rust with a mixture of maneb and nickel sulfate. 15109

A bioassay for volatile toxicants from fungicides in soil. 15162

Factors affecting field performance of nickel salt plus dithiocarbamate fungicide mixtures for the control of wheat rusts. 15201

Eradication of soil fungi by a combination of crop residue, flooding, and anaerobic fermentation. 15213

Effect of fungicides on the larval emergence of the tobacco cyst nematode. 15264

Notice of filing of petition regarding pesticides. 15586

Notice of filing of petition regarding pesticides. 15588

Toxic behavior of two itaconimides. 15622

Effects of surfactants on fungi. 15647

Use of chromatography for selecting systemic quaternary ammonium fungicides. 15660

Movement of nonvolatile, diffusible fungicides through columns of soil. 15669

Fungal compositions and methods for their use. patent 3,370,957. 15675

FUNGUS
The efficacy of various fumigants in controlling Verticillium wilt in south-central Washington. 15184

FUNGUS DISEASES (INSECTS)
A fungus disease of the salt-marsh caterpillar in Arizona. 15253

FUNGUS DISEASES (PLANTS)
Antibiotic treatment of young loblolly pines infected with fusiform rust. 15050

Alternaria of cotton in Somalia. 15061

Fungi associated with Gladiolus roots under continuous cropping conditions. 15088

The occurrence of a Phytophthora root and leaf disease of black pepper in Jamaica. 15106

Genetics of resistance to Erysiphe polygoni in Trifolium pratense. 15193

The occurrence and decline of downy mildew on lima beans in the Middle Atlantic states. 15215

Appraisal of biological control of Arcenthobium campylopodum F. campylopodum by Colletotrichum gloeosporioides. 15283

Control of diseases of shallots. 15521

Properties of purified acid phosphatases from healthy and rust-infected bean leaves. 15652

FUNGUS DISEASES _PLANTS)
Factors in the production and stimulation of some antibiotics of fungal origin inhibiting the growth of pathogenic fungi. 15140

FUSARIUM
Pathogenicity of isolates of the bean wilt Fusarium from England and the United States. 15006

The effect of corn root exudate on the growth of five fungi

GALLERIA
associated with corn roots. 15132

Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

GALLERIA
The mechanisms of pathogenicity of Pseudomonas aeruginosa (Schroeter) Migula. i. The pathogenicity of strain N-06 for larvae of the greater wax moth, Galleria mellonella (Linnaeus). 14911

Pathogenicity of different strains of Entomophthora coronata (Costantin) Kevorkian for larvae of the greater wax moth. 14935

Quantitative studies on purine excretion in the greater wax moth, Galleria mellonella. 14966

GALLERIA MELLONELLA
Pigment-producing variants of Bacillus thuringiensis Berliner from the silkworm. 14953

GAMBUSIA
Preliminary report on the feeding pattern of two species of fish in a rice field habitat. 14988

GAMETOGENESIS
Gametogenesis in the house fly, Musca domestica. 14879

GAMMA GLOBULINS
Gamma globulin levels and neonatal mortality in market calves. 15372

GAMMA RAYS
Induced polygenic mutations in hexaploid wheats. 15621

GARBAGE (FEED)
High mortality in Florida swine herd infected with the encephalomyocarditis virus. an accompanying epizootiologic survey. 15369

GASTROINTESTINAL SYSTEM
Microorganisms from the mid-gut of the larva of Tenebrio obscurus Fabricius. 14924

GENES
Effect of major and minor gene interaction on adaptive parasitism in phytophthora infestans. 15631

GENETICS
Behaviour and random mating. 14931

GEOMETRIDAE
Guide to the Geometridae of Canada (Lepidoptera). I. subfamily Sterrhinae. 14831

GEORGIA
Relative susceptibility of salt-marsh mosquitoes from Georgia and Florida to insecticides. 14967

Infestation of the imported fire ant, Solenopsis saevissima v. richteri, at Fort Benning, Georgia. 14981

Isolation of Listeria monocytogenes from brains of rabies-negative animals. 15438

GERMINATION REDUCTION
Effect of virus yellows on yield and quality of sugar beet seed. 15080

GIBBERELLA
The effect of corn root exudate on the growth of five fungi associated with corn roots. 15132

GIBBERELLIC ACID
The effect of growth substances on Verticillium wilt of. 15181

Phenotypic restoration of fertility in a male-sterile mutant by treatment with gibberellic acid. 15629

GIBBERELLINS
An evaluation of the rate of reproduction of the two-spotted spider mite reared on gibberellin-treated bean plants. 14876

GLADIOLUS
Fungi associated with Gladiolus roots under continuous cropping conditions. 15088

GLANDS (ANIMALS)
The position of the canine prostrate gland. 15294

GLOMERELLA
A dry rot of acorn squash, Cucurbita pepo. L. 15040

GLUCOSIDASES
Beta-glucosidase activity in Erwinia amylovora and Pseudomonas syringae. 15171

GLYCOGEN
Energy sources during embryogenesis of the yellow mealworm, Tenebrio molitor. 14938

GLYCOLIPIDES
The glycerolipids of Mycoplasma mycoides. 15439

GONADS
Studies on the gonads of some immature mosquitoes. 14866

GONOMETA
A noninclusion virus of Gonometa podocarpi (Lepidoptera' Lasiocampidae). 14889

GOSSYPIA SPURIA
Late-season control of European elm scale with bidrin trunk injections. 15612

GOUT
Calcium gout (Kalkgicht) and calcinosis circumscripta in dogs. 15345

GRAIN
Quinoid secretions in grain and flour beetles. 15531

GRANULOMA
A coccidia-like organism associated with subcutaneous granulomata in a dog. 15464

GRANULOSES
Methods for staining capsular virus inclusion bodies typical of granuloses of insects. 14894

The epizootiology of virus diseases in field populations of the armyworm, Pseudaletia unipuncta (Haworth). 14964

GRAPES
Inoculation of etiolated but light-treated leaves of grape with fanleaf virus. 15079

Sting nematode on grape cuttings in Florida. 15168

Effect of storage environment on quality of table grapes and on requirements of sulfur dioxide fumigation program. 15527

GRASSES
Grasshopper damage on short-grass rangeland of the San Carlos Apache Indian Reservation, Arizona. 15247

GREEN RING MOTTLE (CHERRIES)
Evidence against seed transmission of green ring mottle virus in mazzard cherry seedlings. 15060

GREENHOUSE CULTURE
Typical field symptoms of pea viroses produced in greenhouse by deferring inoculation until flowering time or later. 15157

A constant temperature bath for pot-grown plants. 15688

GREENHOUSES
Propagation of braconid parasites of the pea aphid. 14887

GRISEOFULVIN
Control of Alternaria blight of rape and mustard by griseofulvin. 15085

GRYLLIDAE
Effects of carbon dioxide anesthesia on the house cricket, Acheta domesticus (Orthoptera: Gryllidae). 14932

GUANAZOLO
Protection of cucumber seedlings from stone fruit ringspot virus by 8-azaaguanine. 15099

GUAR
Leaf spot of guar caused by Pseudomonas syringae in the United States. 15148

GUATEMALA
Pine cone rust in the highlands of Guatemala. 15169

GUAVAS
Attraction of melon flies to lures on foliage or cane fibers at various heights. 14890

GUINEA PIGS
Effect of cortisone on Leptospira pomona infection in the guinea pig. 15302

Effects of fluoride on magnesium deficiency in the guinea pig. 15446

Studies on infection and immunity with the lungworm, Dictyocaulus viviparus (Bloch). i. active immunization of guinea pigs and rabbits. 15488

GUMBORO DISEASE
Physicochemical properties of the infectious bursal agent (IBA). 15326

GUMMY STEM BLIGHT (WATERMELONS)
Gummy stem blight resistance of introduced watermelons. 15191

GYPONINAE
Studies of the Gyponidae' a new genus- Chloronana (Homoptera' Cicadellidae). 14812

HABITATS
Preliminary report on the feeding pattern of two species of fish in a rice field habitat. 14988

HAEMONCHOSIS
Survey on the helminths of dromedary in Chad, with special referrence to gastro-intestinal strongylosis and haemonchosis (Haemonchus longistipes). 15514

HALO BLIGHT (BEANS)
Analysis of proteirs and enzymes of the interaction between Phaseolus vulgaris and Pseudomonas phaseolicola (halo blight of beans). 15642

HANDBOOKS
Guide to the analysis of pesticide residues. sB953.h8. 15554

Farm chemicals handbook. 1968 ed. 15692

HARVESTING DATE
Mortality of the San Jose scale (Homoptera: Diaspididae) on stored apples cf different varieties and harvest dates. 15533

HEART
Electron microscopy of the bovine heart in congestive failure of high mountain disease. 15361

A cardiac bleeding technique for small birds. 15691

HEART RATE
An investigation of the housefly heartbeat through transection experiments. 14893

HEAT
Note: Elimination of microsporidiosis in laboratory-reared European corn borers by the use of heat. 14939

Heat activation of virus inoculum. 15059

Comparison of heat and quick freezing for relaxing nematodes prior to permanent mounting. 15082

HELIOTHIS ZEA
Relationship of the crop capacity to the depletion of the fat body and egg development in the corn earworm, Heliothis zea, and the fall armyworm, Laphygma frugiperda (Lepidoptera: Noctuidae). 14869

Histology of the reproductive tracts and transmission of sperm in the corn earworm, Heliothis zea. 14871

Bacterial pathogens in Iowa corn insects. 14940

Variety of soybean insects are active in several states. 15232

Comparison of field corn varieties for resistance to corn earworm and stored grain insect injury in the Everglades. 15530

HELMINTHOSPORIUM
The effect of corn root exudate on the growth of five fungi associated with corn roots. 15132

Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

Apple variety resistance to Helminthosporium leafspot. 15197

HEMAGGLUTINATION
Serological investigation in French cattle; research on hemagglutination inhibiting antibodies due to myxovirus parainfluenza-3. 15338

HEMORRHAGE
The development of petechial haemorrhages on the undersurface of the tongue of the horse and its relation to infection with the virus of equine infectious anaemia). das Auftreten von Punktblutungen auf der Zungenunterflache des Pferdes und seine Beziehung zur Infektion mit dem Virus der infektiosen Anamie. 15468

HEMP
Factors in lima bean and hemp seed required for oospore formation by species of Phytophthora.
harnish, w n. 15615

HEPTACHLOR
Soil treatments with insecticides for control of the eye gnats Hippelates collusor and H. hermsi. 14977

Infestation of the imported fire ant, Solenopsis saevissima v. richteri, at Fort Benning, Georgia. 14981

Effect of soil treatments of heptachlor and parathion on predators and parasites of root maggots attacking rutabagas on Prince Edward Island. 15249

Effectiveness of various formulations of five insecticides on insects infesting douglas-fir logs. 15250

Study of modifications of the Mills procedure for chlorinated pesticides in dairy products. 15562

HERBICIDE RESIDUES
Microcoulometric gas chromatography analysis of selected herbicides in water. 15540

Residue studies of tomato foliage and fruits from plants receiving PEBC- "14 pre-or post-emergence. 15560

Metabolism of TOK herbicide in dairy cow. 15564

Method for residues of Zytron, O-2,4-dichlorophenyl O-methyl isopropylphosphoramidothioate, in chicken tissues and eggs. 15565

Determination of linuron and its known and/or suspected metabolites in crop materials. 15566

Degradation of carbamate herbicides in soil. 15567

Notice of filing of petition regarding pesticides. 15587

Notice of filing of petition regarding pesticides. 15589

Dicamba and its metabolite. notice of establishment of temporary tolerance. 15591

Notice of filing of petition regarding pesticides. 15597

Thin layer chromatography of some carbamate and phenylurea pesticides. 15661

Factors affecting the vapor loss of EPTC from soils. 15662

A vapor trapping apparatus for determining the loss of EPTC and other herbicides from soils. 15684

HERBICIDES
Effect of s-triazine and phenylurea herbicides on soil fungi in corn- and soybean-cropped soil. 15093

HERPESVIRUSES

Influence of some representative herbicidal chemicals upon the growth of some soil fungi. 15134

Bark beetle mortality in precommercial herbicide thinnings of western hemlock. 15245

Effect of incorpration and method of irrigation on preemergence herbicide. 15279

Inhibition of photochemical activity of isolated chloroplasts by acylanilides. 15280

Herbicidal control of tall larkspur. 15282

Variations in toxicity to bluegill sunfish of phenoxy herbicides. 15542

Effects of chlorophenoxy herbicides on soybeans. 15646

Infrared absorption spectra and polymeric structures of three s-Triazine herbicides and their metabolites. 15657

Action and effectiveness of certain classes of herbicides. 15667

Herbicidal method utilizing glycol esters of 2,3,6-trichlorophenylacetic acid as herbicides. patent 3,325,273. 15670

A vapor trapping apparatus for determining the loss of EPTC and other herbicides from soils. 15684

HERPESVIRUSES
Isolation and properties of bovine herpesvirus from a calf with respiratory disease and keratoconjuctivitis. 15323

HETERODERA ROSTOCHIENSIS
Stimulation of hatching of the potato-root eelworm Heterodera rostochiensis by ion exchange resins. 15254

HETEROPTERA
On the ecology of Anthocoris nemorum (L) (Hemiptera: Heteroptera). 14810

HEXANE
Extraction of the water with hexane followed by detection and assay using chromatographs equipped with electron capture and micro-coulometer detectors. 15600

Hexane extractable chlorinated insecticides in human blood. 15606

HEXESTROL
Fecal elimination of estrogens by cattle treated with diethylstilbestrol and hexestrol. 15290

HEXOSES
Pyridine nucleotide-linked enzymatic reduction of triose, pentose, and hexose phosphates associated with rust infection. 15625

HIBERNATION
Mined buds, a hibernation site for spruce budworm. 14804

Overwintering in Pemphigus bursarius (L.). 15243

HIPPELATES
Soil treatments with insecticides for control of the eye gnats Hippelates collusor and H. hermsi. 14977

HIPPODAMIA
Biology of the black cherry aphid in the Willamette Valley, oregon. 15238

HIPPOLATES
Loss of chlorinated hydrocarbon insecticides from soil surface in the field. 15573

HISTOLOGY
A slide smear technique for the diagnosis of laryngotracheitis. 15318

HOG CHOLERA VIRUS
Experimental inactivated-virus hog cholera vaccines' induction period of immunity. 15435

Cytogenetic alterations in swine kidney cells persistently infected with hog cholera virus and propagated with and without antiserum in the medium. 15437

HOMICIDES
Note on identification of azinphosmethyl in human tissues. and in figs. 15579

HOMOCYSTINE
Systemic and fungicidal activity of D-, L-, and DL-ethionine, S-alkyl-DL-HOMOCYSTEIN derivatives, and methionine antagonists. 15138

HOPS
Soil fumigation by injection and irrigation for the control of nematodes on hops. 15261

DDT. proposed establishment of pesticide and food additive tolerances. 15592

HORMONES
Effects of hormones and injury on RNA synthesis in saturniid moths. 14861

Variations in uterine response to experimental infection due to the hormonal state of the ovaries. II. The mobilization of leukocytes and their importance in uterine bactericidal activity. 15288

HORSES
Tranquillising horses with promazine hydrochloride. 15291

A preliminary note on the use of an inactivated vaccine against equine pest. 15329

Viral encephalomyelitis of equines and domestic ruminants in the Near East. i. 15350

Persistent diarrhoea and vitamin B in the horse. 15418

The development of petechial haemorrhages on the undersurface of the tongue of the horse and its relation to infection with the virus of equine infectious anaemia). das Auftreten von Punktblutungen auf der Zungenunterflache des Pferdes und seine Beziehung zur Infektion mit dem Virus der infektiosen Anamie. 15468

HOST INDEXING (PLANTS)
Host range and properties of the globe artichoke curly dwarf virus. 15141

HOST SPECIFICITY
Further additions to the list of fungus pathogens recorded in Chile. 15145

HULL ROT (PRUNUS AMYGDALUS)
Hull rot disease of almonds. 15135

Role of fumaric acid in the hull rot disease of almond. 15136

HUMAN DISEASES
St. Louis encephalitis vector studies in Houston, Texas. 14983

HUMAN NUTRITION
Use of emulsified fat for intraperitoneal alimentation. 15289

HUMANS
La lutte chimique contre les insects nuisibles. (chemical control of insect pests). ed. 3. sB951.15. 14906

Biology of vector-associated diseases in Vietnam. 15460

Bovine papular stomatitis, pseudo-cow-pox and milker's nodules. 15489

Chemical ovicidal measures as applied to Taenia hydatigena, Taenia ovis, Taenia pisiformis, and Echinococcus granulosus. 15516

DDT in humans and animals; determination of DDA in urine using an ion exchange resin. 15555

The determination of chlorinated insecticides in human blood. 15556

A sensitive procedure for urinary p-nitrophenol determination as a measure of exposure to parathion. 15559

Determination of DOT and related substances in human fat. 15569

Note on identification of azinphosmethyl in human tissues. and in figs. 15579

Hexane extractable chlorinated insecticides in human blood. 15606

Electron capture gas chromatography. 15674

HUMIDITY
Effect of moisture content and length of storage period npon germination percentage of seeds of corn, wheat, and barley free cf stcrage fungi. 15524

HYDRACRYLIC ACID BETA-LACTONE
Studies on avian encephalomyelitis. III Immune response to heta-propiolactcne inactivated virus. 15336

Newcastle disease: Preliminary field tests of beta-propiolactone-killed vaccine. 15371

Experimental inactivated-virus hog cholera vaccines' induction period of immunity. 15435

HYDROGEN SULFIDE
A mechanism for continuous production of hydrogen sulfide in soils suhmerged in water. 15664

HYDROGEN-ION CONCENTRATION
Influence of nutrition, PH, soil temperature, and soil moistnre on Phythium hlight of highland bentgrass. 15139

Investigations on Dursban insecticide. metaholism of O,O-diethyl O-3,5,6-trichloro-2-pyridyl phosphorothioate and 3,5,6-trichloro-2-pyridinol in plants. 15582

HYLEMYA
Effect of soil treatments of heptachlor and parathion on predators and parasites of root maggots attacking rutahagas on Prince Edward Island. 15249

HYMENOPTERA
The hymenopterous parasites (Hymenoptera: Aphidiidae et Aphelinidae) of the pea aphid in eastern North America. 14830

Transmission of hacterial pathogens hy the ovipositor of a hymenotterous parasite. 14867

Fungi associated with a wood wasp in dying pines in Tasmania. 15205

A wide-range variahle temperature cabinet for hio-ecological studies. 15689

HYPERA
Holl weevil survival in Carolinas higher than in 1961. 15231

HYPERHECTEINA
Some difficult to distinguish species of thh genus Hyperecteina Schiner (Diptera, Larvaevoridae). 14808

HYPERSENSITIVITY
Accumulation of fluorescent compounds in tohacco associated with tohacco mosaic virns hypersensitivity. 15072

HYPODERMA
Cattle grub control with Bayer 21-199 in the Everglades. 15513

HYPODERMA BOVIS
Comparative efficiency of coumaphos applications on various body areas hy hrush-on or pour-on for the control of cattle gruhs. 15505

HYPODERMA LINEATUM
Comparative efficiency of conmaphos applications on various body areas hy hrush-on or pcur-on for the control of cattle gruhs. 15505

ICE
Reduction of peach decays hy hydrocooling with chemical solutions and chemically treated ice. 15188

ICERYA
Interference with the hiological control of cottony-cushion scale by insecticides and attempts to re-establish a favorable natural halance. 15224

ILEX
Control of plant-nematodes and weeds in holly nurseries. 15257

IMIDAN
Note on extraction of a polar insecticide (Imidan) from milk. 15551

IMIDES
Chemicals tested as space repellents for yellow-fever mosquitoes. iI. carhanilates, henzamides, aliphatic amides, and imides. 14915

IMMUNITY
Immune response to a plant virus hound or serologically precipitated in agar. 14999

Studies on avian encephalomyelitis. I The use of a serum -neutralization test in the detection of immunity levels. 15334

Stndies on avian encephalomyelitis. II Immune responses to vaccination procedures. 15335

Studies on avian encephalomyelitis. III Immune response to beta-propiolactone inactivated virus. 15336

The effect of parental immunity and age on the response to infectious laryngotracheitis vaccination. 15346

A pasture trial using 2 immunizing doses of a parasitic hronchitis vaccine. 15391

IMMUNIZATION
The interaction of potato viruses X and Y in inoculated tohacco leaves at various temperatures. 15051

Studies on an immunogenic agent against Brucella ahortus. II. Prelimary studies of an immunologically active soluhle agglutinogen. 15287

Inoculation of microbes into the intestinal tracts of small animals. 15298

A preliminary note on the use of an inactivated vaccine against equine pest. 15329

The effect of parental immunity and age on the response to infectious laryngotracheitis vaccination. 15346

Newcastle disease immunity in broilers and caponettes vaccinated with killed-virus and live-virus vaccines. 15349

A new method for the primary evaluation of anti-coccidial activity. 15403

Contribution to the study of ovine listeriosis and immunoprophylaxis against the disease in France. 15414

Experimental inactivated-virns hog cholera vaccines' induction period of immunity. 15435

Response of birds to one intranasal vaccination with B-1 strain of Newcastle disease virus. 15449

Coexistence of infectious bronchitis and infectious laryngotracheitis. 15451

Avian encephalomyelitis immunization with inactivated virus. 15459

Immune response to sheep erythrocytes with cytoxan and hybaroxia. 15465

Immunisation of sheep with multi-component clostridial vaccines. 15469

Experience with fowl pox vaccination. 15470

Studies on infection and immunity with the lungworm, Dictyocaulas viviparus (Bloch). i. active immunization of guinea pigs and rahhits. 15488

Bovine hahesiosis. the passive immunization of calves against Bahesia argentina with special reference to the role of complement fixing antihodies. 15517

IMMUNOCHEMISTRY

IMMUNOCHEMISTRY
Distribution of wound-tumor virus antigens in internal organs of an insect vector. 15182

The antigenic structure of virulent and avirulent strains of Erysipelothrix rhusiopathiae. II. immunochemic and serologic investigations. 15307

Factors affecting the production and detection of ornthosis antibodies in infected turkeys. 15425

Protein and isozyme patterns of sweet potatoes as related to acquired immunity. 15650

IMMUNOLOGY
Detection of bacterial contaminants in live virus poultry vaccines. 15384

A variant type of infectious bronchitis virus in a commercial vaccine. 15448

Response of birds to one intranasal vaccination with B-1 strain of Newcastle disease virus. 15449

INCLUSION BODIES
Methods for staining capsular virus inclusion bodies typical of granuloses of insects. 14894

Effect of urea on the formation of parasporal inclusions in species and varieties of Bacillus cereus group. 14957

Inclusion bodies associated with sugar beet mosaic. 15056

INCUBATION
Effect of incubation temperature on length and infectivity of potato virus X particles in four host species. 15068

INDEXES
Index to genera of pathogens listed in the "Index of Plant Diseases in the United States. 1. 15073

INDIA
India can feed itself. 15693

INDICATOR PLANTS
Variability of seedling clones of citron as indicators of exocortis virus of citrus. 14997

INDUSTRY
WACA discussions cover 'silent spring'. 15570

Opportunities and challenges are ahead for fertilizer industry. 15694

INFECTIOUS BRONCHITIS
Coexistence of infectious bronchitis and infectious laryngotracheitis. 15451

INFECTIOUS BRONCHITIS VIRUS
A variant type of infectious bronchitis virus in a commercial vaccine. 15448

INFECTIOUS CANINE HEPATITIS
Electron microscopy of infectious canine hepatitis virus grown in cultures of canine kidney cells. 15475

INFECTIOUS CANINE HEPATITIS VIRUS
Cytologic changes induced by infectious canine hepatitis virus in tissue culture. 15443

INFECTIOUS DISEASES
Effect of incubation temperature on length and infectivity of potato virus X particles in four host species. 15068

INFECTIOUS LARYNGOTRACHEITIS
The effect of parental immunity and age on the response to infectious laryngotracheitis vaccination. 15346

Coexistence of infectious bronchitis and infectious laryngotracheitis. 15451

A quick method for the diagnosis of avian pox and infectious laryngotracheitis. 15463

INFECTIOUS LARYNGOTRACHEITIS VIRUS
Conjunctivitis in chickens caused by a typical infectious laryngotracheitis virus. 15450

Tissue culture and chicken embryo technigues for infectious laryngotracheitis virus studies. 15680

INFECTIOUS SYNOVITIS
The cultivation and modification of the avian infectious synovitis agent in tissue culture. 15493

INFRARED PHOTOGRAPHY
Analysis of Dursban in livestock dips and sprays. 15658

INFRARED SPECTRA
Infrared identification of chlorinated insecticides in the tissues of poisoned fish. 15553

Infrared absorption spectra and polymeric structures of three s-Triazine herbicides and their metabolites. 15657

INJECTIONS
Soil fumigation by injection and irrigation for the control of nematodes on hops. 15261

INJURIES
Effects of hormones and injury on RNA synthesis in saturniid moths. 14861

INSECT ABNORMALITIES
A tergal abnormality in the German cockroach, Blatella germanica (L.). 14944

INSECT ADAPTATION
A comparison of the developmental rates of one- and two-year cycle spruce budworm. 14951

INSECT ANATOMY
Fine structure of the integument of the two-spotted spider mite, Tetranychus telarius (Acarina:Tetranychidae). 14849

The skeletomuscular mechanism of the so-called anal legs in the centipede Scolopendra amazonica (Scolopendridae). 14897

The nervous system of certain abdominal segments and the innervation of the male reproductive system and genitalia of Hyalophora cecropia. (Lepidoptera: Saturniidae). 14907

INSECT BEHAVIOR
The distribution, life history, and economic importance of the winter moth, Operophtera brumata (L.) (Lepidoptera, Geometridae) in Nova Scotia. 14811

A note on Hoplitis producta (Cress.) in Wisconsin (Hymenoptera: Megachilidae). 14833

Feeding behavior and host preferences of some black flies (Diptera: Simuliidae) in Wisconsin. 14851

A study of the flight of the Douglas-fir beetle Dendroctonus pseudotsugae Hopk. (Coleoptera: Scolytidae) III. Flight capacity. 14853

Feeding behavior of the large milkweed bug, Oncopeltus fasciatus. 14858

Mosquitoes feeding on a frog. 14868

Induction of scintillation in the firefly. 14870

Constituents of Dufour's gland in Myrmecia gulosa. 14872

Larval feeding behavior of the cabbage looper, Trichoplusia ni. 14886

The rearing of Phlebotomus sandflies (Diptera: Psychodidae) II. Development and behavior of Panamanian sandflies in laboratory culture. 14899

Life histories and habits of two species of Philodromus (Araneida: Thomisidae) in Ontario. 14936

Laboratory observations of aedine mosquito oviposition (Dipthera, Culicidae, Aedes). 14976

INSECT BIOLOGY
Sampling studies with Aedes vexans and some other Wisconsin Aedes (Diptera: Culicidae). 14813

On the life history and habits of the palm weevil, Rhynchophorus palmarium. 14820

Life-history studies of Amblyseius limonicus, with comparative observations on Amblyseius hibisci (Acarina' Phytoseiidae). 14832

The winter biology of Culex tarsalis (Diptera: Culicidae)

in Kern county, California. 14837

Some notes on the life history of Plega hanksi (Neuroptera Mantispidae). 14845

Rearing and biology of Wohlfahrtia vigil (Diptera: Sarcophagidae). 14875

Life history of the Monterey pine needle miner, Argyresthia pilatella (Lepidoptera' Yponomeutidae). 14898

Tegminal amplifiers and spectrum consistencies in Conocephalus nigropleurum (Bruner), Tettigoniidae. 14925

Larval descriptions of two species of Panorpa (Mecoptera: Panorpidae), with notes on their biology. 14927

Preliminary observations on the incidence and biology of a mermithid nematode of Aedes sollicatans in Louisiana. (abstract). 14933

Observations on Odioporus longicollis (Coleoptera, Curculionidae) in Kathmandu Valley and its suburbs. 14955

Exposure of house flies and oriental rat fleas on a high-altitude balloon flight. 14962

Parasitism of Sirex noctilio F by Schlettererius cinctipes (Cresson) (Hymenoptera: Stephanidae). 14965

The biology and ecology of Dendroctonus valens Lec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans)Zimm in central Mexico(Coleopterai Scolytidae). 15165

A wide-range variable temperature cabinet for bio-ecological studies. 15689

INSECT CAGES
Plastic pots compared with clay pots for rearing white-fringed beetle larvae. 14857

New methods of introducing visual and auditory cues. (abstract). 14974

An inexpensive and effective indoor insectary. 15679

A ventilation unit for aerating insectary sleeve cages. 15690

INSECT COLLECTING EQUIPMENT
The CDC Sweeper, a six volt mechanical aspirator for collecting adult mosquitoes. (abstract). 15685

INSECT CONTROL
Sexing of Mexican fruit flies. 14946

Mosquito control activities of the U.S. Armed Forces in the Republic of Vietnam. 14975

Panel: opposing philosophies in mosquito control technology: emphasis on control of adult mosquitoes in Florida. 14980

A preliminary report on a potential new mosquito control weapon. 14982

Source reduction through water management. 14985

Safety of wildlife is important to planners of gnat-control program. 15239

INSECT CULTURES
Studies on Odontoloxozus longicornis (Diptera: Neriidae.) Part I. Life history and descriptions of immature stages. 14839

INSECT DETECTION
Radar observations of locust swarms. 14836

INSECT DISEASES
Fine structure of some insect viruses. 14860

Transmission of some insect viruses with particular reference to ovarial transmission and its importance in the development of epizootics. 14862

Fecundity, longevity, and transinfectivity of citrus red mites (Panonychus citri) infected with a noninclusion virus. 14883

A noninclusion virus of Gonometa podocarpi (Lepidoptera' Lasiocampidae). 14889

The mechanisms of pathogenicity of Pseudomonas aeruginosa (Schroeter) Migula. i. The pathogenicity of strain N-06 for larvae of the greater wax moth, Galleria mellonella (Linnaeus). 14911

Bacterial pathogens in Iowa corn insects. 14940

Editorial: A call to invertebrate pathologists. 14961

The epizootiology of virus diseases in field populations of the armyworm, Pseudaletia unipuncta (Haworth). 14964

Food-plant spectrum and elimination of disease of cinnabar moth larvae, Hypocrita jacobaeae (L.) (lepidoptera: Arctiidae). 15276

INSECT DISSEMINATION
The distribution, life history, and economic importance of the winter moth, Operophtera brumata (L.) (Lepidoptera, Geometridae) in Nova Scotia. 14811

Dispersal and migration of tepa-sterilized Mexican fruit flies. 14842

INSECT ECOLOGY
Dynamics of populations. iI. factors controlling population growth and population size in Drosophila pseudoobscura and in Drosophila melanogaster. 14803

Ecology of an oasis. 14809

On the ecology of Anthocoris nemorum (L) (Hemiptera: Heteroptera). 14810

The biology and ecology of Dendroctonus valens Lec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans)Zimm in central Mexico(Coleopterai Scolytidae). 15165

A wide-range variable temperature cabinet for bio-ecological studies. 15689

INSECT EGGS
The effect of apholate and thiotepa on nucleic acid synthesis and nucleotide ratios in housefly eggs. 14930

Preliminary observations on the incidence and biology of a mermithid nematode of Aedes sollicatans in Louisiana. (abstract). 14933

Note: Elimination of microsporidiosis in laboratory-reared European corn borers by the use of heat. 14939

The effect of circadian rhythm on the development of Drosophila. 14941

Failure to isolate microorganisms from within mosquito eggs. 14968

A new bleaching technique with possible general use in entomology. 15686

INSECT FLIGHT
A study of the flight of the Douglas-fir beetle Dendroctonus pseudotsugae Hopk. (Coleoptera: Scolytidae) III. Flight capacity. 14853

Changes in haemolymph lipoproteins during locust flight. 14914

New methods of introducing visual and auditory cues. (abstract). 14974

INSECT GENETICS
A comparison of the developmental rates of one- and two-year cycle spruce budworm. 14951

INSECT HISTOLOGY
Histology of the reproductive tracts and transmission of sperm in the corn earworm, Heliothis zea. 14871

Some histological aspects of the boll weevil. 14873

INSECT IDENTIFICATION
The genus Laelaspis, with descriptions of three new species (Acarina: Laelaptidae). 14826

INSECT MATING

A new genus and a new species of Pyraustinae (Lepidoptera: Pyralidae). 14834

Characters for specific identification of females in the leafhopper genus Empoasca (Hemiptera:Cicadellidae). 14838

INSECT MATING
Resistance to American foul brood in honeybees. iII. differential survival of the two kinds of larvae from two-drone matings. 14971

INSECT METABOLISM
Inhibition of housefly acetylcholinesterase by carbamates. 14891

Metabolism of malathion in desert locust. i. activation of malataion into an anticholinesterase. 14918

INSECT MIGRATION
Summer migration of the alfalfa weevil, Hypera postica (Coleoptera: Curculionidae). 14819

Migration of the army cutworm, Chorizagrotis auxiliaris _Lepidoptera, Noctuidae). i. evidence for a migration. 14835

Dispersal and migration of tepa-sterilized Mexican fruit flies. 14842

INSECT MORPHOLOGY
The distribution, life history, and economic importance of the winter moth, Operophtera brumata (L.) (Lepidoptera, Geometridae) in Nova Scotia. 14811

Correlation of European chafer development with the flowering period of common plants. 14818

Life-history studies of Amblyseius limonicus, with comparative observations on Amblyseius hibisci (Acarina' Phytoseiidae). 14832

Studies on Odontoloxozus longicornis (Diptera: Neriidae.) Part I. Life history and descriptions of immature stages. 14839

The morphology and higher classification of the Coreoidea (Hemiptera-Heteroptera). i-II. 14840

Studies on the gonads of some immature mosquitoes. 14866

The rearing of Phlebotomus sandflies (Diptera: Psychodidae) II. Development and behavior of Panamanian sandflies in laboratory culture. 14899

The effects of photoperiod and temperature on the induction of diapause in Aedes triseriatus (Say). 14900

The effects of photoperiod, temperature, and food supply on rate of development and diapause in Coccinella novemnotata. 14916

Energy sources during embryogenesis of the yellow mealworm, Tenebric molitor. 14938

The effect of circadian rhythm on the development of Drosophila. 14941

A comparison of the developmental rates of one- and two-year cycle spruce budworm. 14951

INSECT MORTALITY
Preliminary observations on the incidence and biology of a mermithid nematode of Aedes sollicitans in Louisiana. (abstract). 14933

Biotic potential of phytoseiid mites fed on virus-infected citrus red mites. 14950

The influence of sublethal dosages of insecticides on the basal follicles of Aedes aegypti (L.). (abstract). 14986

Bark beetle mortality in precommercial herbicide thinnings of western hemlock. 15245

INSECT NUTRITION
Nutritional pest control: The 'self-protection' of foodstuffs against Tribolium confusum (Coleoptera: Tenebrionidae) often presumably through nutritional factors. 14824

Mosquitoes feeding on a frog. 14868

Larval feeding behavior of the cabbage looper, Trichoplusia ni. 14886

Methods for studying aggregation and feeding behavior of the confused flour beetle, Tribolium confusum (Coleoptera' Tenebrionidae). 14910

Nectar of peach leaf glands as insect food. 14937

Some problems associated with weighing aphids that have fed after starving, as a method of measuring intake of plant sap. 14943

Food-plant spectrum and elimination of disease of cinnabar moth larvae, Hypocrita jacobaeae (L.) (lepidoptera: Arctiidae). 15276

INSECT OUTBREAKS
The biology and ecology of Dendroctonus valens Lec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans) Zimm in central Mexico (Coleopterai Scolytidae). 15165

INSECT PESTS
The distribution, life history, and economic importance of the winter moth, Operophtera brumata (L.) (Lepidoptera, Geometridae) in Nova Scotia. 14811

Longevity of the fire blight organism, Erwinia amylovora on pear trees in the greenhouse as demonstrated by infection after sandblast injury. 14901

La lutte chimique contre les insects nuisibles. (chemical control of insect pests). ed. 3. sB951.15. 14906

Preliminary laboratory tests utilizing Beauveria bassiana (Balsamo) Vuillemin on Calomycterus setarius Roelofs. 15234

Timber pests and diseases. 1st ed. TA422. P5. 15529

INSECT PHYSIOLOGY
Stimuli provided by courtship of male Drosophila melanogaster. 14859

Relationship of the crop capacity to the depletion of the fat body and egg development in the corn earworm, Heliothis zea, and the fall armyworm, Laphygma frugiperda (Lepidoptera: Noctuidae). 14869

The occurrence of acetylcholine in the nervous tissues of American cockroaches. 14874

Sex pheromones of noctuid moths. VII. Quantitative aspects of the production and release of pheromone by females of Trichoplusia ni (Lepidoptera:Noctuidae). 14882

Sterol storage and reproduction in the house fly. 14922

The fate of dietary H3-beta-sitosterol in the adult house fly. 14923

Lysozyme-like action of enzymes from the cockroach Periplaneta americana and from some other sources. 14934

Quantitative studies on purine excretion in the greater wax moth, Galleria mellonella. 14966

Some observations on the fine structure of the midgut of the mite Anystis sp. 14969

The influence of physical stress on growth and nuclear polyhedrosis of Trichoplusia ni (Hubner). 15242

INSECT POPULATIONS
Seasonal changes in the abundance of certain aphids and their predators in =giza.. 14854

Relative effectiveness of resistance of field corn to the european corn borer, Pyrausta nubilalis, in crop protection and in population control. 15229

INSECT REARING
The coexistence of insect parasites and hosts in laboratory ecosystems. 14801

On the ecology of Anthocoris nemorum (L) (Hemiptera: Heteroptera). 14810

A note on Hoplitis producta (Cress.) in Wisconsin

(Hymenoptera: Megachilidae). 14833

Plastic pots compared with clay pots for rearing white-fringed beetle larvae. 14857

Rearing and biology of Woblfahrtia vigil (Diptera: Sarcophagidae). 14875

An evalnation of tbe rate of reproduction of the two-spotted spider mite reared on gibberellin-treated bean plants. 14876

Rearing of tbree spotted alfalfa aphid Hymenopterns parasites for mass release. 14878

Tbe rearing of Pblebotomns sandflies (Diptera: Psychodidae) II. Development and bebavior of Panamanian sandflies in labcratory cultnre. 14899

Photoperiod effects in Pieris rapae. 14913

Nematode parasites and associates of the smaller European elm bark beetle, Scolytns mnltistriatns (Marsbam). 14947

The inflnence of sublethal dosages of insecticides on the basal follicles cf Aedes aegypti (L.). (ahstract). 14986

The biology and ecology of Dendroctonus valens Flec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans)Zimm in central Mexico(Coleopterai Scolytidae). 15165

Overwintering in Pemphigus hursarius (L.). 15243

DDT and related compounds in dog food and CSMA media used in insect rearing. 15611

INSECT REPELLENTS
Laboratory tests with sixty-five compounds as repellents against houseflies. 14847

La lutte cbimigne contre les insects nuisihles. (chemical control of insect pests). ed. 3. sB951.15. 14906

Cbemicals tested as space repellents for yellow-fever mosguitoes. iI. carhanilates, henzamides, aliphatic amides, and imides. 14915

Mosgnito control activities of the U.S. Armed Forces in the Republic of Vietnam. 14975

Repellancy of reflective alnminum to transient aphid viral vectors. 15189

INSECT TAXONOMY
Stndies of tbe Gyponidae' a new genus- Cbloronana (Homoptera' Cicadellidae). 14812

A clarification of certain structnres in the thoracic region of Oxyrbacbis (Romoptera'Membracidae). 14821

New tecbnigue for preparation and study of motb flies. 14908

INSECT TEMPERATURE
A comparison of the developmental rates of one- and two-year cycle spruce budworm. 14951

INSECT TRAPS
Dispersal and migration of tepa-sterilized Mexican fruit flies. 14842

Attraction of melon flies to lures on foliage or cane fibers at various beigbts. 14890

INSECT VECTORS
Mosguito control activities of the U.S. Armed Forces in the Republic of Vietnam. 14975

Pear decline virus transmission by pear Psylla. 15089

Distrihntion of wonnd-tumor virns antigens in internal organs of an insect vector. 15182

Repellancy of reflective alnminum to transient apbid viral vectors. 15189

Scotylid vectors of the Dntch elm disease in Ontario. 15214

Leukosis - Transmission hy beetles. 15311

Experimental trasmission of African borse-sickness hy means of mosguitoes. 15424

Biology of vector-associated diseases in Vietnam. 15460

INSECTICIDAL AEROSOLS
The influence of spray programs on the fauna of apple orcbards in Nova Scotia. XII. Second supplement to VII. Effects on heneficial artbropods. 14912

Studies on fine-particle, coarse-particle, and concentrated aerosols. 14948

INSECTICIDE APPLICATION
Soil treatments witb hroadcast or band applications of organophosphorous or carhamate insecticides for prevention of wireworm damage to potatoes. 15227

Comparative efficiency of coumaphos applications on varions hody areas hy hrusb-on or pour-on for the control of cattle grubs. 15505

INSECTICIDE RESIDUES
The bebavior of insecticides in forest soils. 15539

Persistence of two systemic carbamate insecticides in three types of soils. 15541

The bebavior of DDT and Zectran on a forest soil. 15544

Methods for extracting insecticides from soil. 15545

Insecticide analysis procedures used hy the Klamath Basin study. (Paper presented at Pacific Nortb West Pollution Control Association, Vancouver, B.c.). 15547

Extraction of chlorinated pesticide residues from nonfatty samples of low moisture content. 15550

Determination of Niagara NIA-10242 and its pbenol degradation product in corn silage and milk and determination of otber carbamates hy GLC of their thiophosphoryl derivatives. 15552

Infrared identification of chlorinated insecticides in the tissues of poisoned fish. 15553

DDT in bumans and animals; determination of DDA in urine using an ion exchange resin. 15555

Tbe determination of cblorinated insecticides in human blood. 15556

A sensitive procedure for urinary p-nitrophenol determination as a measure of exposure to parathion. 15559

Study of modifications of the Mills procedure for chlorinated pesticides in dairy products. 15562

Rapid cleanup of dairy products for analysis of cblorinated insecticide residne hy electron capture gas chromatography. 15568

Determination of DOT and related suhstances in human fat. 15569

Metabolism of dDT and some other chlorinated organic compounds hy Aerohacter aerogenes. 15571

Screening method for the detection of chlorinated hydrocarbon pesticide residues in the fat of milk, cbeese, and hntter. 15572

Loss of cblorinated hydrocarbon insecticides from soil surface in the field. 15573

Determination of Zectran residues in aerial forest spraying. 15576

Acetonitrile dilution: a possihle source of error in the "rapid metbod for cblorinated pesticide residues in nonfatty foods". 15577

Rapid screening metbod for DDT in milk with gas chromatography. 15580

Simultaneous electron capture - microcoulometric detection for qualitative and quantitative pesticide analysis. (in: Gulf Coast Shellfish Sanitation Research Center. technical Memorandum (GCSSRC FY) 66 -2.). 15583

INSECTICIDE RESISTANT INSECTS

DDT. proposed establishment of pesticide and food additive tolerances. 15592

Food additives permitted in food for human consumption. 1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethanol. 15594

Food additives permitted in food for human consumption. Ethion. 15595

Notice of filing of petition regarding pesticides. 15599

Sweep co-Distillation cleanup of milk for determination of organophosphate and chlorinated hydrocarbon pesticides. 156D1

Lethal endrin concentration in the blood of gizzard shad. 15603

Thin layer chromatography of some carbamate and phenylurea pesticides. 15661

Semi-automatic extraction of organic materials from water. public Health Service Water Pollution Surveillance System Applications and Development Report 16. 15665

INSECTICIDE RESISTANT INSECTS

A photoperiodic effect on the daily susceptibility of the house fly to trichlorfon. 14877

Susceptibility of mosquitoes to silica gel insecticides. 14920

Relative susceptibility of salt-marsh mosquitoes from Georgia and Florida to insecticides. 14967

Development of DDT resistance in certain mayflies in New Brunswick. 14970

Cross-tolerance of California Aedes nigromaculis (Ludlow) larvae to EPN, Abate, and Dursban. (abstract). 14973

Biological activity of surfactants and some chemical intermediates against pre-imaginal mosquitoes. 14979

Acaricida tests on the biarra strain of organophosphorus resistant cattle tick Boophilus microplus from southern Queensland. 15506

INSECTICIDES

Inhibition of housefly acetylcholinesterase by carbamates. 14891

La lutte chimique contre les insects nuisibles. (chemical control of insect pests). ed. 3. sB951.15. 14906

Insecticidal and natualistic control chironomid larvae in Lake Dalwigk, Vallejo, California. 14919

Simple screening test for systemic aphicides. 14921

Soil treatments with insecticides for control of the eye gnats Hippelates collusor and H. hermsi. 14977

A preliminary report on a potential new mosquito control weapon. 14982

1967 insecticide recommendations; peach insect control (commercial). 15225

Soil treatments with broadcast or band applications of organophosphorous or carbamate insecticides for prevention of wireworm damage to potatoes. 15227

Investigations on Dursban insecticide. metabolism of O,O-diethyl O-3,5,6-trichloro-2-pyridyl phosphorothioate and 3,5,6-trichloro-2-pyridinol in plants. 15582

Toxicologic effects of a phosphorothioic acid insecticide in sheep. 15609

Toxicologic effects of a phosphorothioic acid insecticide in cattle. 1561D

Analysis of Dursban in livestock dips and sprays. 1565B

Pesticides' unsung assistants. 15663

INSECTS

Critical application of logistic principle on the laboratory population of Anthrenus flavipes Lec. 14B56

Exposure of house flies and oriental rat fleas on a high-altitude balloon flight. 14962

INTEGRATED CONTROL (INSECTS)

La lutte chimique contre les insects nuisibles. (chemical control of insect pests). ed. 3. sB951.15. 14906

INTERFERON

Effect of interferon on early enzyme and viral DNA synthesis in vaccinia virus infection. 15401

INTRAMUSCULAR VACCINATION

Revaccination of chickens against Newcastle disease by vent, wing-web, and intramuscular routes. 15495

ION EXCHANGE RESINS

Stimulation of hatching of the potato-root eelworm Heterodera rostochiensis by ion exchange resins. 15254

DDT in humans and animals; determination of DDA in urine using an ion exchange resin. 15555

IONIZATION CHAMBERS

Gas chromatographic determination of residues of organophosphorus pesticides with a modified flame ionization detector. 15561

IPS

Observations on the effect of nematodes on Ips confusus (LeConte) and other bark beetles. 14928

IPS BONANSEAI

The biology and ecology of Dendroctonus valens Blec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans)Zimm in central Mexico(Coleopterai Scolytidae). 15165

IPS CRIBRICOLLIS

The biology and ecology of Dendroctonus valens Blec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans)Zimm in central Mexico(Coleopterai Scolytidae). 15165

IRRIGATION

Effect of irrigation method and frequency on development of Phytophtbora infestans on potatoes under arid conditions. 15166

Soil fumigation by injection and irrigation for the control of nematodes on hops. 15261

Effect of incorpration and method of irrigation on preemergence herbicide. 15279

ISOMERISM

Effects of isomers of DDD on thyroid and adrenal function in rats. 156D7

ISOPROPYL-3-METHYLPYRAZOL-5-YL DIMETHYLCARBAMATE, 1-

Persistence of two systemic carbamate insecticides in three types of soils. 15541

ISRAEL

Occurrence of two bacterial diseases on new hosts in Israel. 15209

Bacterial spot disease of tomatoes and peppers in Israel. 15210

IXODIDAE

The ixodid ticks of Tanzania. a study of the zoogeography of the Ixodidae of an east African country. gL458.a2Y2. 1484B

IXODIDES

Acaricida tests on the biarra strain of organophosphorus resistant cattle tick Boophilus microplus from southern Queensland. 15506

KADANG-KADANG (COCONUTS)

Intracellular inclusions observed in epidermal strips from foliage of cadang-cadang infected coconut trees in the Philippines. 15156

KALE
Acetonitrile dilution: a possible source of error in the "rapid method for chlorinated pesticide residues in nonfatty foods". 15577

KING PENGUINS
Isolation of an anaerobic vibrio from a king penguin (Aptenodytes longirostris). 15368

LABELING
Intracellular labeling of TMV antigen with ferritin-antibody conjugate. 15177

WACA discussions cover 'silent spring'. 15570

LABORATORIES
Critical application of logistic principle on the laboratory population of Anthrenus flavipes Lec. 14856

LABORATORY ANIMALS
Effect of naturally occurring highly mineralized water on the growth of laboratory animals. 15305

Oxyuriasis in laboratory mouse colonies. 15386

Toxicologic effects of a phosphorothioic acid insecticide in sheep. 15609

LAELAPTIDAE
The genus Laelaspis, with descriptions of three new species (Acarina: Laelaptidae). 14826

LAELASPIS
The genus Laelaspis, with descriptions of three new species (Acarina: Laelaptidae). 14826

LAMBS
Exterotoxemia of sheep. II. distribution of I131 radioiodinated serum albumin in brains of Clostridium perfringens type D intoxicated lambs. 15376

Enterotoxemia of sheep. III. Clostridium perfringens type D antitoxin titers of normal, nonvaccinated lambs. 15378

LAMPYRIDAE
Induction of scintillation in the firefly. 14870

LAPHYGMA
Relationship of the crop capacity to the depletion of the fat body and egg development in the corn earworm, Heliothis zea, and the fall armyworm, Laphygma frugiperda (Lepidoptera: Noctuidae). 14869

LARVAE
Effect of temperature, aeration, pH, and the presence of soil on the toxicity of various insecticides to mosquito larvae. 14817

Plastic pots compared with clay pots for rearing white-fringed beetle larvae. 14857

Effects of hormones and injury on RNA synthesis in saturniid moths. 14861

Larval descriptions of two species of Panorpa (Mecoptera: Panorpidae), with notes on their biology. 14927

The effect of circadian rhythm on the development of Drosophila. 14941

Notes: Effect of certain carcinogenic 2-fluorenamine derivatives on larvae of the house fly, Musca domestica Linnaeus. 14952

Fungi associated with larvae of Sitona spp. 15097

Preliminary study on some of the factors affecting control of western corn rootworm larvae with soil insecticides. 15246

Effect of fungicides on the larval emergence of the tobacco cyst nematode. 15264

Food-plant spectrum and elimination of disease of cinnabar moth larvae, Hypocrita jacobaeae (L.) (lepidoptera: Arctiidae). 15276

Experimental visceral larva migrans in the pig. 15355

Survival of infective larvae of the cattle nematodes, Cooperia punctata, Trichostrongylus axei, and Oesophagostomum radiatum. 15519

LARVICIDES
Biological activity of surfactants and some chemical intermediates against pre-imaginal mosquitoes. 14979

Panel: opposing philosophies in mosquito control technology: emphasis on control of adult mosquitoes in Florida. 14980

LASERS
Candling and sighting techniques used in laser investigations of the European pine sawfly, Neodiprion sertifer (Hymenoptera: Diprionidae). 14902

LASIODERMA
Fumigant toxicity of 1,2,3-trihromopropene, ethyleneimine, crotyl bromide and carbon tetrachloride to stored-product insects. 14888

LATE BLIGHT (POTATOES)
Base composition of soluble ribonucleic acid from Phytophthora infestans. 15149

LEAD
Acute lead poisoning in swine. 15604

LEAF ROLL (POTATOES)
The diphenylamine reaction and transmission experiments with phenol extracts of plants infected with potato leaf roll virus. 15101

Leafroll of tomato caused by a strain of potato leafroll virus. 15143

LEAF SCORCH (STRAWBERRIES)
Studies on the isolation of the strawberry leaf scorch pathogen Diplocarpon earliana. 15173

LEAF SPOT (ALFALFA)
Association of polygalacturonate trans-eliminase with southern anthracnose but not with spring black stem or Stemphylium leaf spot of alfalfa. 15624

LEAF SPOT (GUAR)
Leaf spot of guar caused by Pseudomonas syringae in the United States. 15148

LEAVES
Some environmental factors influencing penetration from appressoria of Puccinia graminis f. sp. tritici on seedling wheat leaves. 15020

Bean yellow mosaic virus in detached leaves of red clover plants. 15038

Residue studies of tomato foliage and fruits from plants receiving PEBC- ^{14}C pre-or post-emergence. 15560

Properties of purified acid phosphatases from healthy and rust-infected bean leaves. 15652

Respiration, photosynthesis, and dark fixation of C1402 by healthy and rusted bean leaves. 15653

LEGISLATION
WACA discussions cover 'silent spring'. 15570

LEGUMES
The etiology of legume bloat-nonvolatile acids. 15457

LEPIDOPTERA
Interesting captures from the Toudon region (A-M). 14802

Esterases of crystalliferous bacteria pathogenic for insects: epizootiological applications. 14929

LEPTOSPHAERULINA
Species of Leptosphaerulina on forage plants. 15063

LEPTOSPIROSIS
Detection of leptospires in naturally infected dogs, using fluorescein-labeled antibodies. 15309

Observations on the colonial morphology of leptospires. 15317

Natural occurrence of leptospirosis in the meadow vole, Microtus pennsylvanicus. 15343

LEPTOTYPHLUS DUJARDINI

LEPTOTYPHLUS DUJARDINI
Soil fauna research in the forest of Maures (Var). the dale of Fournel (Coleoptera). 14822

LETTUCE
Effects of big vein on the irrigated head lettuce crop. 15122

Notice of filing of petition regarding pesticides. 15589

LEUCOPHAEA
The importance of locomotor activity in circadian systems. 14909

LEUKOCYTES
Variations in uterine response to experimental infection due to the hormonal state of the ovaries. II. The mobilization of leukocytes and their importance in uterine bactericidal activity. 15288

Variation in the inflammatory response and bactericidal activity of the sheep uterus during the estrous cycle. 15296

LEUKOSIS
Leukosis - Transmission by beetles. 15311

LIGHT
Sex pheromones of noctuid moths. VIII. Orientation to light by pheromone-stimulated males of Trichoplusia ni (Lepidoptera: Noctuidae). 14881

Effect of light on the rate of decay of three wood destroying fungi. 15044

Effects of light, temperature, and fertilizer on infection of wheat leaves by Septoria tritici. 15047

Inoculation of etiolated but light-treated leaves of grape with fanleaf virus. 15079

LIGHT TRAPS
Mating frequency of female pink bollworms collected from light traps. 14884

LIGNIN
Color formation on phenol-containing media as related to lignin breakdown by wood-rotting basidiomycetes. 15630

LIMA BEANS
Sporulation of Phytophthora phaseoli. 15086

Evidence for a chemical basis of resistance of lima bean plants to downy mildew. 15206

The occurrence and decline of downy mildew on lima beans in the Middle Atlantic States. 15215

Transmission of downy mildew of lima beans by slugs. 15218

Factors in lima bean and hemp seed required for oospore formation by species of Phytophthora.
Harnish, W N. 15615

LIME
Sweetpotato soil, rot development in Olivier silt loam soil as affected by annual applications of lime or sulfur over a seven-year period. 15123

LINDANE
The biology and ecology of Dendroctonus valens Lec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans) Zimm in central Mexico (Coleoptera: Scolytidae). 15165

Control of the pickleworm on cucurbits. 15228

Effectiveness of various formulations of five insecticides on insects infesting douglas-fir logs. 15250

Lindane in diesel oil prevents western pine beetle attacks for at least one year. 15251

Field tests with insecticides for control of lone star ticks on cattle. 15502

Study of modifications of the Mills procedure for chlorinated pesticides in dairy products. 15562

Rapid cleanup of dairy products for analysis of chlorinated insecticide residue by electron capture gas chromatography. 15568

The determination of pesticides in tissues with the electron capture detector without prior cleanup. 15578

LINURON
Determination of linuron and its known and/or suspected metabolites in crop materials. 15566

LIPEURUS CAPONIS
Dust containing Bacillus thuringiensis for control of chicken body, shaft, and wing lice. 15504

LIPIDS
Changes in haemolymph lipoproteins during locust flight. 14914

LISTERIOSIS
Contribution to the study of ovine listeriosis and immunoprophylaxis against the disease in France. 15414

Isolation of Listeria monocytogenes from brains of rabies-negative animals. 15438

LITTLE LEAF (PINUS)
A pine disease in New Zealand resembling littleleaf. 15078

Plant- parasitic nematodes associated with shortleaf pine showing symptoms of littleleaf. 15269

LIVER DISEASES
Toxocara lesions stimulate those of Ascaris sum. 15456

LIVESTOCK
La lutte chimique contre les insects nuisibles. (chemical control of insect pests). ed. 3. SB951.15. 14906

Studies on the erythrocyte sedimentation rate in domestic animals. VII. Monleau formation. 15303

Feed additives for control of house fly larvae in livestock feces. 15503

Method for treating animals infested with pests of the phylum arthropoda. patent 3,367,831. 15508

A survey to determine the salmonella contamination rate in livestock and poultry feeds. 15535

The toxicity of aminotriazole to domestic animals. 15608

Analysis of Dursban in livestock dips and sprays. 15658

LIVESTOCK DISEASES
The isolation of infectious bovine rhinotrachetis virus from cattle affected with conjunctivitis-observations on the experimental infection. 15313

Report of the Committe on Nomenclature and Reporting of Disease, Northeastern Conference on Avian Disease, June, 1962. 15340

Newcastle disease immunity in broilers and caponettes vaccinated with killed-virus and live-virus vaccines. 15349

Enzootic nasal adenocarcinoma in sheep. 15357

Epizootic hemorrhagic disease in white-tailed deer- characteristic of the South Dakota strain of virus. 15436

LIZARDS
Control of the snake mite (Ophionyssus natricis), other mites, and certain insects with the sorptive dust, SG 67. 15507

LOAM
Sweetpotato soil, rot development in Olivier silt loam soil as affected by annual applications of lime or sulfur over a seven-year period. 15123

LOCOMOTION
The importance of locomotor activity in circadian systems. 14909

LOCUSTA MIGRATORIA
Reaction thresholds and specificity of an odor receptor on the antenna of Locusta. 14863

LOGS
Effectiveness of various formulations of five insecticides on insects infesting douglas-fir logs. 15250

LOOSE SMUT (OATS)
Oat smut races of the South Atlantic States. 15115

LOUISIANA
Effect of sugarcane borer infestation on the yield and grade of corn. 15233

LUMBER PRESERVATION
Timber pests and diseases. 1st ed. TA422. P5. 15529

LUMBER PRESERVATIVES
Notice of withdrawal of petition for food additives. 15590

LYMPHOSARCOMA
Clinical and hematologic studies of lymphosarcoma in a herd of cattle. 15477

Lymphosarcoma in the rabbit. a case report and general review. 15487

MACROSTELES
Reduction of aster yellows. 15053

MAGNESIUM
Effects of fluoride on magnesium deficiency in the guinea pig. 15446

MAGNESIUM SILICATE
In vitro increase in virus infectivity. II. 15221

MALACOSOMA AMERICANUM
Control of the eastern tent caterpillar, Malacosoma americanum (Fabricius), by distribution of spores of two species of Clostridium. 15226

MALARIA
Mosquito control activities of the U.S. Armed Forces in the Republic of Vietnam. 14975

MALATHION
Effect of temperature, aeration, pH, and the presence of soil on the toxicity of various insecticides to mosquito larvae. 14817

Metabolism of malathion in desert locust. i. activation of malataion into an anticholinesterase. 14918

Insecticidal and natualistic control chironomid larvae in Lake Dalwigk, Vallejo, California. 14919

The influence of subletbal dosages of insecticides on the basal follicles of Aedes aegypti (L.). (abstract). 14986

Evaluation of thermal and nontbermal fogs against four species of mosquitoes. (abstract). 14987

The biology and ecology of Dendroctonus valens Lec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans)Zimm in central Mexico(Coleopterai Scolytidae). 15165

Interference with the biological control of cottony-cushion scale by insecticides and attempts to re-establish a favorable natural balance. 15224

Field tests with insecticides for control of lone star ticks on cattle. 15502

Fish, wildlife unaffected by boll weevil program. 15557

Pesticides' unsung assistants. 15663

MALEIC HYDRAZIDE
The effect of growth substances on Verticillium wilt of. 15181

MALVA
Record of two Longidorus species from Sudan. 15274

MANEB
Control of cucumber scab due to Cladosporium cucumberinum. 15092

Control of asparagus rust with a mixture of maneb and nickel sulfate. 15109

MANTISPIDAE
Some notes on the life history of Plega banksi (Neuroptera Mantispidae). 14845

MANUALS
PPC (Plant Pest Control) Manual. 15584

MARINE BORERS
Estimation of marine-borer attack on wooden surfaces. 15252

MARKETING
Opportunities and challenges are ahead for fertilizer industry. 15694

MASTITIS
Food additives permitted in the feed and drinking water of animals of for the treatment of food-producing animals. food additives permitted in food for human consumption. erythromycin. 15484

MAYETIOLA
Insecticidal control of paedogenetic cecid larvae in mushroom beds. I. incorporation of insecticides into coonpost. II. incorporation of insecticides in the casing layer. 15241

MEDICAL ENTOMOLOGY
La lutte chimique contre les insects nuisibles. (chemical control of insect pests). ed. 3. SH951.15. 14906

MELANOPUS
Grasshopper damage on short-grass rangeland of the San Carlos Apache Indian Reservation, Arizona. 15247

MELOIDOGYNE
The occurrence of a Phytophthora root and leaf disease of black pepper in Jamaica. 15106

Chemotherapeutic control of a root-knot nematode. 15258

Soil fumigation by injection and irrigation for the control of nematodes on hops. 15261

MEMORY
Time memory of bees under the influence of narcosis and of social pacemaking signals (Zeitgeber). 14917

MENOPON GALLINAE
Dust containing Bacillus thuringiensis for control of chicken body, shaft, and wing lice. 15504

MENTHA SPICATA
Record of two Longidorus species from Sudan. 15274

METABOLISM
Respiratory changes during development of rust diseases. 15034

Experimental water intoxication in calves. 15396

Metabolism of TOK herbicide in dairy cow. 15564

Determination of linuron and its known and/or suspected metabolites in crop materials. 15566

Metabolism of dDT and some other chlorinated organic compounds by Aerobacter aerogenes. 15571

METABOLITES
Distribution of bidrin in the foliage of treated trees. 15230

Dicamba and its metabolite. notice of establishment of temporary tolerance. 15591

Metabolism of 2-chloro-4,5-dimethylphenyl N-methylcarbamate in bean plants. 15619

Infrared absorption spectra and polymeric structures of three s-Triazine herbicides and their metabolites. 15657

METAMORPHOSIS
The subimaginal cuticle of the mayfly Callibaetis sp. (Ephemeroptera). 14942

Inhibition of metamorphosis and of ecdysis in mosquitoes. 14959

METHANOL

METHANOL
Influence of pre-storage treatments on the mortality of the San Jose scale (Homoptera: Diaspididae) on apples held in storage. 15532

METHIONINE
Systemic and fungicidal activity of D-, L-, and DL-ethionine, S-alkyl-DL-HOMOCYSTEIN derivatives, and methionine antagonists. 15138

METHOXYCHLOR
Extraction of chlorinated pesticide residues from nonfatty samples of low moisture content. 15550

Metabolism of dDT and some other chlorinated organic compounds by Aerobacter aerogenes. 15571

METHYL BROMIDE
Escape of methyl bromide through wallboards. 15581

METHYL-4-CHLOROPHENOXY) BUTYRIC ACID, 4-(2-
Action and effectiveness of certain classes of herbicides. 15667

MICE
Mammalian detoxification of insecticides. 14989

Exterotoxemia of sheep. I. Effects of Clostridium perfringens type D toxin on the brains of sheep and mice. 15377

Oxyuriasis in laboratory mouse colonies. 15386

Mammalian detoxification of insecticides. 15602

MICROORGANISMS
The pathogenicity for honey-bee larvae of microorganisms associated with European foulbrood. 14855

Transmission of bacterial pathogens by the ovipositor of a hymenopterous parasite. 14867

Sensitivity spectrum of Bacillus thuringiensis var. thuringiensis Berliner to antibiotics, sulfonamides, and other substances. 14895

Index to genera of pathogens listed in the "Index of Plant Diseases in the United States. 1. 15073

Cankers of ornamental crabapples associated with Physalospora obtusa and other microorganisms. 15105

Microorganisms on cucumber seedlings. 15107

Inoculation of microbes into the intestinal tracts of small animals. 15298

Nocardia asteroides as a mammary pathogen of cattle. II. the sources of nocardial infection and experimental reproduction of the disease. 15432

Degradation of carbamate herbicides in soil. 15567

MILDEW (BARLEY)
Nucleotide composition of RNA in healthy and mildew-infected leaves of barley. 15120

MILK
Note on extraction of a polar insecticide (Imidan) from milk. 15551

Determination of Niagara NIA-10242 and its phenol degradation product in corn silage and milk and determination of other carbamates by GLC of their thiophosphoryl derivatives. 15552

Simple ultrasensitive test for detecting penicillin in milk. 15575

Rapid screening method for DDT in milk with gas chromatography. 15580

Sweep co-Distillation cleanup of milk for determination of organophosphate and chlorinated hydrocarbon pesticides. 15601

MILK ANALYSIS
The detection of antibody against Leptospira pomona in composite herd milk samples. 15337

MILK FAT
Study of modifications of the Mills procedure for chlorinated pesticides in dairy products. 15562

Screening method for the detection of chlorinated hydrocarbon pesticide residues in the fat of milk, cheese, and butter. 15572

MILKERS' NODULES
Bovine papular stomatitis, pseudo-cow-pox and milker's nodules. 15489

MINERAL OIL
Effect of growth-regulating and other compounds on bacterial spot of pepper. 15219

Pesticides' unsung assistants. 15663

MISSISSIPPI
A report of the occurrence of Camellia flower blight in Mississippi. 15027

MITES
The susceptibility of honey bees of different ages to infestation by Acarapis woodi (Rennie). 14905

Several insects cause concern. 14991

Three plans for using acaricides to control mites on apple. 15223

Variety of soybean insects are active in several states. 15232

The control of poultry lice and mites with several organic incecticides. 15240

Experimentally induced bovine psoroptic acariasis in a rabbit. 15407

MITOSIS
Nuclear condition and division in vegetative hyphae of Rhizoctonia solani. 15644

MOLDS
Virus-like particles of a fraction of a statolon, a mould product. 15617

MOLTING (INSECTS)
Inhibition of metamorphosis and of ecdysis in mosquitoes. 14959

MONILIASIS
Albicans infection in chickens. I. Effect of vitamin A nutritional factors influencing experimental Candida deficiency. 15393

Effects of vitamin-A deficiency and high-level chlortetracycline on experimental candidiasis of turkeys. 15479

MONTEREY-PINE NEEDLE MINER
Life history of the Monterey pine needle miner, Argyresthia pilatella (Lepidoptera' Yponomeutidae). 14898

MONURON
Action and effectiveness of certain classes of herbicides. 15667

MORTALITY
Determination of nematode mortality. 15255

The development of a chicken embryo lethal strain of avian encephalomyelitis virus. 15413

Influence of pre-storage treatments on the mortality of the San Jose scale (Homoptera: Diaspididae) on apples held in storage. 15532

Mortality of the San Jose scale (Homoptera: Diaspididae) on stored apples of different varieties and harvest dates. 15533

MOSAIC (ALFALFA)
Alfalfa mosaic virus transmitted through alfalfa seed. 15055

MOSAIC (APPLES)
Transmission of apple mosaic and stem-pitting viruses through root grafts. 15126

MOSAIC (BEANS)
Seed transmission of bean mosaic viruses. 15130

The role of seed transmission in the epidemiology of bean mosaics in central Washington. 15163

A difference in the translocability of two viruses in bean plants. 15170

MOSAIC (BROADBEANS)
An outbreak of broadbean diseases in Iran. 15091

MOSAIC (CUCUMBERS)
Effects of temperature and light on plant susceptibility to cucumber mosaic virus by aphid transmission. 15194

Metabolite changes induced by cucumber mosaic virus in resistant and snsceptible strains of cowpea. 15217

Effect of chloramphenicol on the concentrations of free amino acids and amides in healthy and cucumber mosaic virus (CMV- Y) infected plants. 15655

MOSAIC (RADISHES)
Transmission of radish mosaic virus. 15024

Radish mosaic viruses. 150B4

MOSAIC (SUGAR BEETS)
Inclusion bodies associated with sugar beet mosaic. 15056

In vitro increase in virus infectivity. II. 15221

MOSAIC (SUGARCANE)
A new strain of sugarcane mosaic virus. 14994

Mosaic susceptibility of sugarcane seedlings as determined by mechanical inoculation and natural infection. 15036

MOSAIC (TOBACCO)
Accumulation of fluorescent compounds in tobacco associated with tobacco mosaic virus hypersensitivity. 15072

Intracellular labeling of TMV antigen with ferritin-antibody conjugate. 15177

Uridine-H3 incorporation in tobacco infected by tobacco mosaic virus. 15190

Transmission of tobacco mosaic virus in tomato seed. 1519B

Failure to confirm the synthesis of TMV in a cellfree system. 1520B

MOSAIC (WATERMELONS)
Studies on the host range of watermelon mosaic virus in Hawaii. 15200

MOTHS
The distribution, life history, and economic importance of the winter moth, Operophtera brumata (L.) (Lepidoptera, Geometridae) in Nova Scotia. 14811

Effects of hormones and injury on RNA synthesis in saturniid moths. 14861

Food-plant spectrum and elimination of disease of cinnabar moth larvae, Hypocrita jacobaeae (L.) (lepidoptera: Arctiidae). 15276

MOTTLE (COWPEAS)
Purification, serology, and properties of a new cowpea virus. 15103

MUCK SOILS
Control of Verticillium wilt of peppermint by soil fumigation in muck soil. 15065

Persistence of two systemic carbamate insecticides in three types of soils. 15541

MULCHING
Effects of mulching and nitrogen on corn borer susceptibility in corn. 15248

MULES
Shift to chemical weed control hastens change from mules to tractors. 15278

MURAMIDASE
Lysozyme-like action of enzymes from the cockroach Periplaneta americana and from some other sources. 14934

MUSA PARADISICA
Observations on Odioporus longicollis (Coleoptera, Curculionidae) in Kathmandu Valley and its suburbs. 14955

MUSCA
Variety of soybean insects are active in several states. 15232

MUSCA DOMESTICA
Laboratory tests with sixty-five compounds as repellents against houseflies. 14B47

The effectiveness of commercial formulations of Bacillus thuringiensis Berliner on house-fly larvae. 14B64

A photoperiodic effect on the daily susceptibility of the house fly to trichlorfon. 14877

Gametogenesis in the house fly, Musca domestica. 14879

Inhibition of housefly acetylcholinesterase by carbamates. 14891

An investigation of the housefly heartbeat through transection experiments. 14893

Sterol storage and reproduction in the house fly. 14922

The fate of dietary H3-beta-sitosterol in the adult house fly. 14923

Effect on adult emergence of whole and partial X-irradiation of pupae of the housefly, Musca domestica nebulo. 14926

The effect of apholate and thiotepa on nucleic acid synthesis and nucleotide ratios in housefly eggs. 14930

Studies on fine-particle, coarse-particle, and concentrated aerosols. 1494B

Notes: Effect of certain carcinogenic 2-fluorenamine derivatives on larvae of the house fly, Musca domestica Linnaeus. 14952

A bioassay technique for determining the insecticidal activity of preparations containing Bacillus thuringiensis Berliner. 14960

Exposure of house flies and oriental rat fleas on a high-altitude balloon flight. 14962

The effectiveness of liquefied-gas-propelled concentrated allethrin aerosols and air-atomized dibrom aerosols against normal and resistant house flies. 14984

Feed additives for control of house fly larvae in livestock feces. 15503

MUSHROOMS
Insecticidal control of paedogenetic cecid larvae in mushroom beds. I. incorporation of insecticides into coonpost. II. incorporation of insecticides in the casing layer. 15241

MUTATION
Antibiotic resistance and mutation rates of mycoplasma. 15353

MUTATIONS
Induced polygenic mutations in hexaploid wheats. 15621

MYCOLOGY
The occurrence and decline of downy mildew on lima beans in the Middle Atlantic states. 15215

Mechanisms of variations in Verticillium albo-atrum. 1561B

Prevention of photodynamic killing of fungal cells by carotenoids. 15620

Pectin trans-eliminase and polygalacturonase production by Rhizoctonia solani and other fungi. 15645

Formation of the basidial stage of some isolates of Rhizoctonia. 15648

MYCOPLASMA GALLISEPTICUM

MYCOPLASMA GALLISEPTICUM
The effect of the use of antibacterial drugs, particularly as food additives, on the emergence of drug-resistant strains of bacteria in animals. 15467

MYCOPLASMA MYCOIDES
The glycerolipids of Mycoplasma mycoides. 15439

MYCOPLASMOSIS
Cultivation of Mycoplasma of avian origin. 15314

Coexistence of infectious bronchitis and infectious laryngotracheitis. 15451

MYCORRHIZA
A nematode (Heloidodera sp) on Douglas-fir mycorrhizae. 15275

MYIASIS
Rearing and biology of Wohlfahrtia vigil (Diptera: Sarcophagidae). 14875

MYRMECIA GULOSA
Constituents of Dufour's gland in Myrmecia gulosa. 14872

MYRMELEONTIDAE
Danish Myrmeleontidae and their distribution. 14841

MYXOVIRUSES
Isolation of an unidentified myxovirus from chickens with a respiratory disease. 15320

MYZUS
Transmission of virus Y by instars of Myzus persicae (Homoptera: Aphidae). 14949

NA O-PHENYLPHENATE
Polyethylene liners and fungicides for peaches and nectarines. 15526

NABAM
Action of soil fungicides. IV. changes in the spectrum of soil fungi. V. sensitivity of soil organism in vitro. 15041

Wilt disease of golf greens and its control with nabam. 15116

NALED
The effectiveness of liquefied-gas-propelled concentrated allethrin aerosols and air-atomized dibrom aerosols against normal and resistant house flies. 14984

NARCOSIS
Time memory of bees under the influence of narcosis and of social pacemaking signals (Zeitgeber). 14917

NATURAL CONTROL (INSECTS)
Insecticidal and natualistic control chironomid larvae in Lake Dalwigk, Vallejo, California. 14919

A comparison of the developmental rates of one- and two-year cycle spruce budworm. 14951

NA2,4,5-TRICHLOROPHENOXIDE
Control of diseases of shallots. 15521

NECTAR
Nectar of peach leaf glands as insect food. 14937

NECTARINES
Polyethylene liners and fungicides for peaches and nectarines. 15526

NEMATOCIDES
Field trials of new nematocides in 1960 for controlling root-knot nematodes. 15256

A method for assaying nematocidal activity of experimental chemicals. 15260

New nematocides. 15268

NEMATODES
Observations on the effect of nematodes on Ips confusus (LeConte) and other bark beetles. 14928

Preliminary observations on the incidence and biology of a mermithid nematode of Aedes sollicitans in Louisiana. (abstract). 14933

Nematode parasites and associates of the smaller European elm bark beetle, Scolytus multistriatus (Marsham). 14947

Comparison of heat and quick freezing for relaxing nematodes prior to permanent mounting. 15082

Control of nematodes on blue spruce. 15263

Survey on the helminths of dromedary in Chad, with special reference to gastro-intestinal strongylosis and haemonchosis (Haemonchus longistipes). 15514

Three gastro-intestinal nematodes recently recorded from British cattle. 15518

Survival of infective larvae of the cattle nematodes, Cooperia punctata, Trichostrongylus axei, and Oesophagostomum radiatum. 15519

Note on staining as an aid in counting vinegar eelworms in vinegar. 15534

NEMATOLOGY
Comparison of heat and quick freezing for relaxing nematodes prior to permanent mounting. 15082

Host-parasite relationships of garden balsam and some nematodes. 15265

NEODIPRION
Candling and sighting techniques used in laser investigations of the European pine sawfly, Neodiprion sertifer (Hymenoptera: Diprionidae). 14902

NEOPLASMS
Pulmonary adenomatosis of sheep-metastasizing bronchiolar tumors. 15347

Neoplasms of the canine and feline urinary bladder: Clinical findings, diagnosis, and treatment. 15423

Study of chicken sarcoma (strain 13) by vent exposure. 15471

Some biochemical effects of alkylating agents. 15676

NEOPLASTIC DISEASES
Clinical and hematologic studies of lymphosarcoma in a herd of cattle. 15477

NEPHROBLASTOMA
Studies on the transmission and pathology of a viral-induced avian nephroblastoma (embryonal _ephroma). 1549D

NERIIDAE
Studies on Odontoloxozus longicornis (Diptera: Neriidae.) Part I. Life history and descriptions of immature stages. 14839

NERVOUS SYSTEM
The nervous system of certain abdominal segments and the innervation of the male reproductive system and genitalia of Hyalophora cecropia. (Lepidoptera: Saturniidae). 149D7

NEW JERSEY
Forecasting downy mildew of lima bean in Cape May County, New Jersey. 15D87

NEW SPECIES
Japygidae of South America. 4' The genus Anstrjapyx and descriptions of new species. 14843

NEWCASTLE DISEASE
Newcastle disease immunity in broilers and caponettes vaccinated with killed-virus and live-virus vaccines. 15349

Revaccination of chickens against Newcastle disease by vent, wing-web, and intramuscular routes. 15495

NEWCASTLE DISEASE VACCINES
Newcastle disease: Preliminary field tests of beta-propiolactone-killed vaccine. 15371

Response of birds to one intranasal vaccination with B-1 strain of Newcastle disease virus. 15449

NICKEL COMPOUNDS
Factors affecting field performance of nickel salt plus dithiocarbamate fungicide mixtures for the control of wheat rusts. 15201

NICKEL SULFATE
Control of asparagus rust with a mixture of maneb and nickel sulfate. 15109

NITROGEN
Quantitative studies on purine excretion in the greater wax moth, Galleria mellonella. 14966

Nitrogen as a factor in the development of exocortis of citrus. 15203

Effects of mulching and nitrogen on corn borer susceptibility in corn. 15248

NITROGEN MUSTARDS
Some biocbemical effects of alkylating agents. 15676

NOCTUIDAE
Sex pheromones of noctuid moths. VIII. Orientation to light by pheromone-stimulated males of Trichoplusia ni (Lepidoptera: Noctuidae). 14881

Sex pheromones of noctuid moths. VII. Quantitative aspects of tbe production and release of pheromone by females of Trichoplusia ni (Lepidoptera:Noctuidae). 14882

NOMENCLATURE
Tbe trivial name of the potato tuberworm (Lepidoptera: Gelechiidae. 14823

NORTH AMERICA
The hymencpterous parasites (Hymenoptera: Aphidiidae et Aphelinidae) of the pea aphid in eastern North America. 14830

NORTHEASTERN UNITED STATES
Gypsy moth defoliation. 15235

NOSEMA DISEASE
The effects of sampling sites cn Nosema determination. 14904

NOVA SCOTIA
Tbe distribution, life history, and economic importance of tbe winter moth, Operopbtera hrumata (L.) (Lepidoptera, Geometridae) in Nova Scotia. 14811

NUCLEIC ACIDS
Nucleic acids extracted from the virus polyhedra of tbe silkworm, Bombyx mori (Linnaeus). 14850

Tbe effect of apholate and thiotepa on nucleic acid synthesis and nucleotide ratios in housefly eggs. 14930

NUCLEOTIDES
Nucleotide composition of RNA in healthy and mildew-infected leaves of barley. 15120

NYSSA
A new disease of swamp tupelo. 15271

OASES
Ecology of an oasis. 14809

OATS
Identification and distribution of oat smuts of the Southeastern United States. 15114

ODIOPORUS LONGICOLLIS
Obseruations on Odioporus longicollis (Coleoptera, Curculionidae) in Kathmandu Valley and its suburbs. 14955

OILS
Effect of growth-regulating and other compounds on bacterial spot of pepper. 15219

Lindane in diesel oil prevents western pine beetle attacks for at least one year. 15251

Toxicity of topically applied fats and oils. 15520

Analysis of chlorinated pesticide residues in fats and oils, utilizing dimethyl sulfoxide: a collaborative study. 15558

OLFACTOMETERS
Reaction thresholds and specificity of an odor receptor on the antenna cf Locusta. 14863

ONCOGENIC VIRUSES
An epizootic of histiocytic sarcomas in chickens induced by a cell-free agent. 15430

ONCOPELTUS
Feeding behavior of the large milkweed bug, Oncopeltus fasciatus. 14858

ONIONS
Some observations on the number of root lesion nematodes necessary to cause injury to seedling onions. 15048

Selective isolation of soft-rot bacteria of onion. 15094

Pathogenicity of the stubby root nematode to onion. 15259

ONTARIO
Scotylid vectors of the Dutch elm disease in Ontario. 15214

OOSPORES
Factors in lima bean and hemp seed required for oospore formation by species of Phytophthora.
harnish, w n. 15615

OPRIONYSSUS
Control of the snake mite (Ophionyssus natricis), other mites, and certain insects witb the sorptive dust, SG 67. 15507

OREGON
8iology of the black cherry aphid in the Willamette Valley, oregon. 15238

ORGANOPHOSPHORUS COMPOUNDS
New nematocides. 15268

Gas chromatographic determination of residues of organopbosphorus pesticides with a modified flame ionization detector. 15561

Sweep co-Distillation cleanup of milk for determination of organophosphate and chlorinated hydrocarbon pesticides. 15601

ORNAMENTAL PLANTS
Further additions to the list of fungus pathogens recorded in Cbile. 15145

ORNITHOSIS
The histopathologic characteristics of diseases producine inflamation of tbe air sacs in turkeys-a comparative study. 15324

Case report- An outbreak of ornithosis in New Mexico. 15367

Factors affecting the production and detection of ornthosis antihodies in infected turkeys. 15425

ORYZAEPHILUS
Fumigant toxicity of 1,2,3-trihromopropene, ethyleneimine, crotyl hromide and carbon tetrachloride to stored-product insects. 14888

OSTRINIA
Effects of mulching and nitrogen on corn borer susceptibility in corn. 15248

OVARIES
Variatious in uterine response to experimental infection due to the hormonal state of the ovaries. II. The mobilization of leukocytes and their importance in uterine hactericidal activity. 15288

OVICIDES
Chemical ovicidal measures as applied to Taenla hydatigena, Taenia ovis, Taenia pisiformis, and Echinococcus granulosus. 15516

OVIPOSITORS
Laboratory observations of aedine mosquito oviposition (Diptbera, Culicidae, Aedes). 14976

OXALATES
In vitro degradation of oxalate and of cellulose by rumen ingesta from sheep fed halogeton glomeratus. 15390

Pigweed (Amaranthus retroflexus). an oxalate-containing plant. 15404

OXYGEN

OXYGEN
Influence of oxygen supply on survival of plant parasitic nematodes in soil. 15272

OXYRHACHIS
A clarification of certain structures in the thoracic region of Oxyrhachis (Homoptera'Membracidae). 14821

OXYTETRACYCLINE
Chemicals for plant disease control. 15128

The influence of terephthalic acid on oxytetracycline serum levels in chickens, Studies on mode of action, I. 15442

The effect of the use of antibacterial drugs, particularly as food additives, on the emergence of drug-resistant strains of bacteria in animals. 15467

The therapeutic value of terramycin-TPA on CRD. 15491

Notice of filing of petition for food additive oxytetracycline. 15585

OXYURIASIS
Oxyuriasis in laboratory mouse colonies. 15386

OZONE
Comparative effectiveness of some equipment and methods of measuring low concentrations of ozone. 15180

Characterization of the plant damage problem by air pollutants in New Jersey. 15538

PALMAE
On the life history and habits of the palm weevil, Rhynchophorus palmarium. 14820

PANOGEN
Seedling disease of wheat caused by Sclerotium rolfsii. 15098

PANONYCHUS
Fecundity, longevity, and transinfectivity of citrus red mites (Panonychus citri) infected with a noninclusion virus. 14883

PANONYCHUS CITRI
Biotic potential of phytoseiid mites fed on virus-infected citrus red mites. 14950

PANORPA
Larval descriptions of two species of Panorpa (Mecoptera: Panorpidae), with notes on their biology. 14927

PAPAYAS
Symptoms of tobacco ringspot virus on papaya. 15129

PARAFFIN OILS
Viscosity of naphthenic and paraffinic spray oils in relation to phytotoxicity and Sigatoka disease control on banana leaves. 15023

PARAINFLUENZA-3 VIRUS
Serological investigation in French cattle; research on hemagglutination inhibiting antibodies due to myxovirus parainfluenza-3. 15338

PARAQUAT
Action and effectiveness of certain classes of herbicides. 15667

PARASITES
Parasites and predators associated with five species of leaf-mining insects in black locust. 14814

PARASITIC INSECTS
The coexistence of insect parasites and hosts in laboratory ecosystems. 14801

Viability of the chalcid parasite Tetrastichus pyrillae Crawford from the host Pyrilla perpusilla Walker egg. 14829

Parasitism of Sirex noctilio F by Schlettererius cinctipes (Cresson) (Hymenoptera: Stephanidae). 14965

PARASITIC PLANTS
Appraisal of biological control of Arceuthobium campylopodum F. campylopodum by Colletotrichum gloeosporioides. 15283

PARASITISM
The hymenopterous parasites (Hymenoptera: Aphidiidae et Aphelinidae) of the pea aphid in eastern North America. 14830

Parasites of the red-pine sawfly, Neodiprion nanulus nanulus (Hymenoptera: Diprionidae), in New Brunswick. 14844

Transmission of bacterial pathogens by the ovipositor of a hymenotterous parasite. 14867

Propagation of braconid parasites of the pea aphid. 14887

The susceptibility of honey bees of different ages to infestation by Acarapis woodi (Rennie). 14905

Preliminary observations on the incidence and biology of a mermithid nematode of Aedes sollicitans in Louisiana. (abstract). 14933

Note: Elimination of microsporidiosis in laboratory-reared European corn borers by the use of heat. 14939

Nematode parasites and associates of the smaller European elm bark beetle, Scolytus multistriatus (Marsham). 14947

Evidence for functional cytochrome oxidase in tissues infected by obligate parasites. 15033

Preliminary laboratory tests utilizing Beauveria bassiana (Balsamo) Vuillemin on Calomycterns setarius Roelofs. 15234

Spicaria rileyi (Farlow) Charles, an entomogenous fungus of Trichoplusia ni Hnebner). 15237

A pasture trial using 2 immunizing doses of a parasitic bronchitis vaccine. 15391

Cellular response to endogenous stages of Coccidia in cattle, with observations of the influence of chemicals upon the host-parasite relationship. 15509

Effect of major and minor gene interaction on adaptive parasitism in phytophthora infestans. 15631

PARASITOLOGY
Host-parasite relationships of garden balsam and some nematodes. 15265

PARATHION
Effect of temperature, aeration, pH, and the presence of soil on the toxicity of various insecticides to mosquito larvae. 14817

Efficiency of granulated insecticides influenced by solvents used for impregnation. 14978

Mammalian detoxification of insecticides. 14989

Interference with the biological control of cottony-cushion scale by insecticides and attempts to re-establish a favorable natural balance. 15224

Safety of wildlife is important to planners of gnat-control program. 15239

Effect of soil treatments of heptachlor and parathion on predators and parasites of root maggots attacking rutabagas on Prince Edward Island. 15249

A sensitive procedure for urinary p-nitrophenol determination as a measure of exposure to parathion. 15559

Correlation of the effects of parathion on erythrocyte cholinesterase with symptomatology in pigs. 15574

Mammalian detoxification of insecticides. 15602

PAROTID GLAND
The relation between the composition of parotid saliva and mixed saliva in sheep during the induction of sodium deficiency. 15659

PARSLEY
Stemphylium leaf spot of parsley. 15108

PARTHENOGENESIS
A study of the capability of the rice weevils Sitophilus sasakii and S. oryzae to reproduce parthenogenetically. 14816

PARTICLE SIZE DETERMINATION
Studies on fine-particle, coarse-particle, and concentrated aerosols. 14948

PASTEURELLA BACTERINS
Studies on shipping fever of cattle. II. Prevalence of Pasteurella species in nasal secretions from normal calves and calves with shipping fever. 15387

PASTEURELLOSIS
Studies on pasteurellosis. IV. killed fowl cholera vaccine absorbed on aluminum hydroxide. 15381

Studies on pasteurellosis. III. Control of experimental fowl cholera in chickens and turkeys with an emulsified killed vaccine. 15382

An unusual aspect of Pasteurella pseudotuberculosis in turkeys. 15395

PASTURES
A pasture trial using 2 immunizing doses of a parasitic bronchitis vaccine. 15391

PATENTS
Method for treating animals infested with pests of the phylum arthropoda. patent 3,367,831. 15508

Herbicidal method utilizing glycol esters of 2,3,6-trichlorophenylacetic acid as herbicides. patent 3,325,273. 15670

Antibiotic streptogan and process for preparation. patent 3,334,015. 15671

Fungal compositions and methods for their use. patent 3,370,957. 15675

PATHOGENESIS
Stemphylium ray speck of chrysanthemum. 15195

A second pathogenic race of Pseudomonas sesami. 15199

PEACHES
Nectar of peach leaf glands as insect food. 14937

Maintaining virus-free cultivars of peach in Michigan. 15026

Time of pruning and infection of peach trees by Pseudomonas syringiae. 15042

Behavior of western X virus in wellrogued peach and cherry orchards. 15075

Reduction of peach decays by hydrocooling with chemical solutions and chemically treated ice. 15188

Ammonia injury to apples and peaches in storage. 15522

Polyethylene liners and fungicides for peaches and nectarines. 15526

Food and food products. tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. O-Phenylphenol and its sodium salt. 15593

PEANUT BUTTER
A semi-quantitative determination of aflatoxin B in groundnut meal, groundnuts and peanut butter. 15292

PEANUT MEAL
A semi-quantitative determination of aflatoxin B in groundnut meal, groundnuts and peanut butter. 15292

PEANUTS
Peanut stunt disease survey in Virginia, 1966. 15124

A semi-quantitative determination of aflatoxin B in groundnut meal, groundnuts and peanut butter. 15292

PEARS
Longevity of the fire blight organism, Erwinia amylovora on pear trees in the greenhouse as demonstrated by infection after sandblast injury. 14901

Pear decline virus transmission by pear Psylla. 15089

PEAS
The ribonucleic acids of leaves and pods of peas infected with pea enation mosaic virus. 15017

The effect of storage molds on germination and vigor of canning peas. 15025

Rhizoctonia tip blight and stem rot of pea. 15049

Purification of viruses from pea roots. 15052

Purification of pea enation mosaic virus. 15067

Typical field symptoms of pea viroses produced in greenhouse by deferring inoculation until flowering time or later. 15157

PECTINASE
Pectin trans-eliminase and polygalacturonase production by Rhizoctonia solani and other fungi. 15645

PECTINOPHORA GOSSYPIELLA
Mating studies of the pink bollworm, Pectinophora gossypiella (Lepidoptera: Gelechiidae), based on presence of spermatophores. 14880

Mating frequency of female pink bollworms collected from light traps. 14884

PECTINS
Pectin trans-eliminase and polygalacturonase production by Rhizoctonia solani and other fungi. 15645

PEKIN DUCKS
Eastern encephalitis in white Pekin ducklings on long island. 15356

Studies on Pasteurella anatipestifer infection in white Pekin ducks. 15441

PEMPHIGUS BURSARIUS
Overwintering in Pemphigus bursarius (L.). 15243

PENICILLIN
Safety and tissue residue evaluations in swine fed rations containing chlortetracycline, sulfamethazine, and penicillin. 15411

The effect of the use of antibacterial drugs, particularly as food additives, on the emergence of drug-resistant strains of bacteria in animals. 15467

Simple ultrasensitive test for detecting penicillin in milk. 15575

PENICILLIUM
The effect of corn root exudate on the growth of five fungi associated with corn roots. 15132

PENICILLIUM STOLONIFERUM
Virus-like particles of a fraction of a statolon, a mould product. 15617

PENTACHLORONITROBENZENE
An anomalous effect of pentachloronitrobenzene on the incidence of damping-off caused by a Phythium sp. 15058

Effect of pentachloronitrobenzene. 15178

Control of diseases of shallots. 15521

PENTACHLOROPHENOL
Notice of withdrawal of petition for food additives. 15590

Action and effectiveness of certain classes of herbicides. 15667

PENTOSES
Pyridine nucleotide-linked enzymatic reduction of triose, pentose, and hexose phosphates associated with rust infection. 15625

PEPTIDES
Isolation and characterisation of malformin. 15673

PERIPLANETA
Distribution and fate of 4-C14 cholesterol in the adult male American cockroach. 14896

PERIPLANETA AMERICANA

PERIPLANETA AMERICANA
Lysozyme-like action of enzymes from the cockroach Periplaneta americana and from some other sources. 14934

PERMEABILITY
Permeability changes caused by victorin. 15651

PEROXIDASES
Peroxidase activity in virus-infected sweet potatoes. 15113

Peroxidases and their relation to vascular browning in banana roots. 15117

PERSICARGAS
The subgenus Persicargas, new subgenus (Ixodoidea, Argasidae, Argas). I. A. (P.) arboreus, an egyptian Persicus-like parasite of wild bees, with a redefinition of the subgenus Argas. 14828

PEST CONTROL
Several insects cause concern. 14991

Population ecology and pest control. 14993

U.SDA's long range objectives in meeting agricultural pest problems. 15286

PESTICIDE ANALYSIS
Selective residue determination of sulfur-, halogen-, and phosphorus-containing pesticides by helium-plasma emission spectrometry. 15656

PESTICIDE APPLICATION
New nematocides. 15268

PESTICIDE RESIDUES
Relation between residues of folpet and control of brown rot on sour cherry fruit in Door County, Wisconsin, 1962. 15137

Safety of wildlife is important to planners of gnat-control program. 15239

The spectrophotofluorometric determination of buquinolate in poultry tissue and eggs. 15511

Guide to the analysis of pesticide residues. sB953.b8. 15554

Fish, wildlife unaffected by boll weevil program. 15557

Analysis of chlorinated pesticide residues in fats and oils, utilizing dimethyl sulfoxide: a collaborative study. 15558

Gas chromatographic determination of residues of organophosphorus pesticides with a modified flame ionization detector. 15561

DDT reportedly discovered in antarctic seals and fish. 15563

Note on identification of azinphosmethyl in human tissues. and in figs. 15579

PFC (Plant Pest Control) Manual. 15584

Notice of filing of petition regarding pesticides. 15586

Notice of filing of petition regarding pesticides. 15588

Notice of withdrawal of petition for food additives. 15590

Food and food products. tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. O-Phenylphenol and its sodium salt. 15593

Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. procedural regulations. fees. specific tolerances. general provisions. 15598

Selective residue determination of sulfur-, halogen-, and phosphorus-containing pesticides by helium-plasma emission spectrometry. 15656

Electron capture gas chromatography. 15674

PESTICIDES
Mammalian detoxification of insecticides. 14989

An obstacle course in ragweed control. 15281

U.SDA's long range objectives in meeting agricultural pest problems. 15286

Method for treating animals infested with pests of the phylum arthropoda. patent 3,367,831. 15508

Water pollution control and abatement. tD420.w45. 15548

Rachel Carson influence gains momentum as book appears. 15549

WACA discussions cover 'silent spring'. 15570

Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. procedural regulations. fees. specific tolerances. general provisions. 15598

Farm chemicals handbook. 1968 ed. 15692

Pesticide safety and use in Europe. 15695

Liability for misuse of pesticides. 15697

PHARMACOLOGY
Pharmacology and toxicology of carbon tetrachloride in the sheep. iV. reduction and augmentation of toxicity to sheep. 15397

PHEASANTS
Case report- botulism type C outbreak on a pheasant game farm. 15486

PHENOL REACTION
Color formation on phenol-containing media as related to lignin breakdown by wood-rotting basidiomycetes. 15630

PHENOLS
The diphenylamine reaction and transmission experiments with phenol extracts of plants infected with potato leaf roll virus. 15101

Determination of Niagara NIA-10242 and its phenol degradation product in corn silage and milk and determination of other carbamates by GLC of their thiophosphoryl derivatives. 15552

Food and food products. tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. O-Phenylphenol and its sodium salt. 15593

PHENOTHIAZINE
Tranquillising horses with promazine hydrochloride. 15291

PHEROMONE
Chemical releases of social behavior-IV. The hindgut as the source of the odor trail pheromone in the neotropical army ant genus Eciton. 14807

PHEROMONES
Sex pheromones of noctuid moths. VIII. Orientation to light by pheromone-stimulated males of Trichoplusia ni (Lepidoptera: Noctuidae). 14881

Sex pheromones of noctuid moths. VII. Quantitative aspects of the production and release of pheromone by females of Trichoplusia ni (Lepidoptera:Noctuidae). 14882

PHILODROMUS
Life histories and habits of two species of Philodromus (Araneida: Thomisidae) in Ontario. 14936

PHLEBOTOMUS
The rearing of Phlebotomus sandflies (Diptera: Psychodidae) II. Development and behavior of Panamanian sandflies in laboratory culture. 14899

PHLORIZIN
Metabolism in vitro of phloridzin and other compounds by Venturia inaequalis. 15627

PHOMA
Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

PHOMOPSIS JUNIPEROVORA
A study of symptoms and control of Phomopsis juniperovora on Arizona cypress. 15127

PHOHATE
Heduction of aster yellows. 15053

Preliminary study on some of the factors affecting control of western corn rootworm larvae with soil insecticides. 15246

PHOHMIA
Alkaline phosphomonoesterase activity in insects. 2.Activity in varions cell fractions from the blow fly Phormia regina. 14892

PHOSPHATASES
Properties of purified acid phosphatases from healthy and rnst-infected bean leaves. 15652

PHOSPHATES
Anthelmintic activity of an organic phosphate in cattle and sheep. 15515

PHOSPHOLIPIOS
The glycerolipids of Mycoplasma mycoides. 15439

PHOSPHOROTHIOIC ACID
Toxicologic effects of a phosphorothioic acid insecticide in sheep. 15609

Toxicologic effects of a phosphorothioic acid insecticide in cattle. 15610

PHOSPHORUS
Phosphorus fertilization and the phytotoxicity of simazine. 15613

PHOTOCHEMISTRY
Inhibition of photochemical activity of isolated chloroplasts by acylanilides. 152H0

Prevention of photodynamic killing of fungal cells by carotenoids. 15620

PHOTOPERIODISM
A photoperiodic effect on the daily snsceptibility of the bonse fly to trichlorfon. 14877

Photoperiod effects in Pieris rapae. 14913

PHOTOSENSITIZATION
Ingestion of Ammi visnaga seeds and photosensitization - Tbe canse of vesicular dermatitis in fowls. 15478

Experimental photosensitization by spring parsley (Cymopterus watsonii) in chicks. 15494

PHOTOSYNTHESIS
Photosynthesis in healthy and rnst-affected tissues. 15112

Hespiration, photosynthesis, and dark fixation of C1402 by healthy and rnsted bean leaves. 15653

PHTHORIMAEA OPEHCULELLA
The trivial name of the potato tuberworm (Lepidoptera: Gelechiidae. 14823

PHYSALOSPORA
A dry rot of acorn sguash, Cncurbita pepo. L. 15040

PHYTOPATHOLOGY
Longevity of the fire blight organism, Erwinia amylovora on pear trees in the greenbouse as demonstrated by infection after sandblast injnry. 14901

The ribonucleic acids of leaves and pods of peas infected with pea enation mcsaic virus. 15017

Fnngi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

PHYTOPHTHORA
The occurrence of a Phytophthora root and leaf disease of black pepper in Jamaica. 15106

Systemic and fnngicidal activity of D-, L-, and DL-ethionine, S-alkyl-DL-HOMOCYSTEIN derivatives, and methionine antagonists. 1513H

Hase composition of soluble ribonucleic acid from Phytophthora infestans. 15149

Factors in lima bean and hemp seed required for oospore formation by species of Phytophthora. harnish, w n. 15615

Effect of major and minor gene interaction on adaptive parasitism in phytophthora infestans. 15631

PHYTOPHTHORA INFESTANS
Effect of irrigation method and freguency on development of Phytophthora infestans on potatoes under arid conditions. 15166

PHYTOPHTHORA MEGASPERMA
Isolation of Phytophthora megasperma var- sojae in soil dilution plates. 15623

PHYTOTOXICITY
Deposit rate and spray oil composition in relation to phytotoxicity and Sigatoka disease control on banana leaves. 15022

PICEA
Mined buds, a hibernation site for spruce budworm. 14804

A comparison of the developmental rates of one- and two-year cycle spruce budworm. 14951

Tolerances of Picea SPP to a nematocide. 15636

PICEA PARRYANA
Control of nematodes on blue spruce. 15263

PICLORAM
Action and effectiveness of certain classes of herbicides. 15667

PIERIS
Photoperiod effects in Pieris rapae. 14913

Seasonal shifts in the relative resistance to insect attack of eight commercial cabbage varieties. 152H5

PIERIS RAPAE
A bioassay technigue for determining the insecticidal activity of preparations containing Bacillus thnringiensis Berliner. 14960

PIGMENTATION
Pigment-producing variants of Bacillus thuringiensis Berliner from the silkworm. 14953

PINE CONES
Pine cone rust in the highlands of Guatemala. 15169

PINE NEEDLES
The possible use of pine needles as spore traps. 15077

PINEAPPLE DISEASE (SUGARCANE)
Storage and germination of cnttings and soil microorganisms as they relate to the pineapple disease of sugar cane. 15016

PINEAPPLES
Notice of filing of petition regarding pesticides. 155H6

PINUS
Susceptibility of eastern white pine to chlorotic dwarf. 15039

Effect of light on the rate of decay of three wood destroying fungi. 15044

Physiological factors in the etiology and alleviation of salt-induced decline of roadside maples and pines. 15102

The biology and ecology of Dendroctonus valens Flec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans) Zimm in central Mexico (Coleopterai Scolytidae). 15165

Fungi associated with a wood wasp in dying pines in Tasmania. 15205

Plant- parasitic nematodes associated with shortleaf pine showing symptoms of littleleaf. 15269

PINUS BANKSIANA
Effects of x-irradiation of seed on x-1 and x-2 generations in Pinus banksiana Lambert. 15643

PINUS ELLIOTTII

PINUS ELLIOTTII
Resistance to fusiform rust in slash pine as shown by artificial inoculation. 15090

PINUS PONDEROSA
Albino Peridermium harknessii in ponderosa pine. 15153

Appraisal of biological control of Arceuthobium campylopodum f. campylopodum by Colletotrichum gloeosporioides. 15283

PINUS RADIATA
Parasitism of Sirex noctilio F by Schlettererius cinctipes (Cresson) (Hymenoptera: Stephanidae). 14965

Principal diseases affecting Pinus radiata in Chile. 15008

PINUS TAEDA
Antibiotic treatment of young loblolly pines infected with fusiform rust. 15050

PIPER NIGRUM
The occurrence of a Phytophthora root and leaf disease of black pepper in Jamaica. 15106

PIROPLASMOSIS
Bovine babesiosis. the passive immunization of calves against Babesia argentina with special reference to the role of complement fixing antibodies. 15517

PLACENTA
Placental pathology of sheep with vibiosis. 15392

PLANT ABNORMALITIES
Studies on a virus causing stem grooving and graft-union abnormalities in Virginia Crab apple. 15001

PLANT BIOCHEMISTRY
A survey of green plants for antimicrobial substances. 15186

Evidence for a chemical basis of resistance of lima bean plants to downy mildew. 15206

Mechanisms of variations in Verticillium albo-atrum. 15618

Association of polygalacturonate trans-eliminase with southern anthracnose but not with spring black stem or Stemphylium leaf spot of alfalfa. 15624

Analysis of proteins and enzymes of the interaction between Phaseolus vulgaris and Pseudomonas phaseolicola (halo blight of beans). 15642

Fixation of HC14N by fungi. 15649

Protein and isozyme patterns of sweet potatoes as related to acquired immunity. 15650

Properties of purified acid phosphatases from healthy and rust-infected bean leaves. 15652

Effect of chloramphenicol on the concentrations of free amino acids and amides in healthy and cucumber mosaic virus (CMV- Y) infected plants. 15655

PLANT BREEDING
Pathogen variability and breeding Verticillium wilt resistant strawberries. 15018

PLANT DISEASE CONTROL
Failure of psorosis virus to protect against citrus variegation virus. 15028

Studies on the control of black rot of crucifers by treating seeds with antibiotics. 15100

Heat-induced susceptibility of tobacco to Tropaeolum mosaic virus. 15110

Chemicals for plant disease control. 15128

PLANT DISEASE RESISTANCE
Pathogen variability and breeding Verticillium wilt resistant strawberries. 15018

Mosaic susceptibility of sugarcane seedlings as determined by mechanical inoculation and natural infection. 15036

Cercosporella leaf spot-resistant radish greens. 15046

Resistance to several viral diseases inherited as a unit. 15083

Resistance to fusiform rust in slash pine as shown by artificial inoculation. 15090

Resistance of Brassica oleracea varieties to downy mildew. 15142

Symptomless hosts of the potato spindle tuber virus. 15146

The effect of growth substances on Verticillium wilt of. 15181

Seasonal fluctuations in susceptibility of young elm seedlings to Dutch elm disease. 15187

Genetics of resistance to Erysiphe polygoni in Trifolium pratense. 15193

Evidence for a chemical basis of resistance of lima bean plants to downy mildew. 15206

Seasonal variation in the incidence of radish yellows and effect of crop rotation on plant survival and yield. 15220

Influence of irrigation and soil infestation with strains of Phytophthora dreschleri on root rot resistance of safflower. 15222

Rates of phenolic synthesis in potato roots resistant and susceptible to Veritcillum albo-atrum.
patil, s s. 15654

PLANT DISEASE TRANSMISSION
Methods of mechanical transmission of bean yellow mosaic virus into white clover. 15002

Transmission of radish mosaic virus. 15024

Maintaining virus-free cultivars of peach in Michigan. 15026

Plant-to-plant transfer of stone fruit ringspot virus in squash by pollination. 15035

Effects of time and temperature on rate of graft transmission of the Prunus ringspot virus. 15054

Alfalfa mosaic virus transmitted through alfalfa seed. 15055

Evidence against seed transmission of green ring mottle virus in mazzard cherry seedlings. 15060

Additional evidence on soil transmission of tobacco ringspot virus. 15076

Pear decline virus transmission by pear Psylla. 15089

The diphenylamine reaction and transmission experiments with phenol extracts of plants infected with potato leaf roll virus. 15101

Multiplication and movement of Wisconsin pea streak virus in pea. 15118

Transmission of apple mosaic and stem-pitting viruses through root grafts. 15126

Cross-transmission studies with citrus and prunus viruses. 15155

Preliminary note on transmission of a virus disease resembling tungro of rice in India and other virus-like symptoms. 15159

The transovarial transmission of wound-tumor virus. 15179

Transmission of tobacco mosaic virus in tomato seed. 15198

PLANT DISEASES
Longevity of the fire blight organism, Erwinia amylovora on pear trees in the greenhouse as demonstrated by infection after sandblast injury. 14901

Undescribed plant diseases and new hosts recorded in Oregon during 1960-1961. 15071

Index to genera of pathogens listed in the "Index of Plant Diseases in the United States. 1. 15073

Epidemiology of tea blister blight (Exobasidium vexans).

iII. Spore deposition and disease prediction. 15095

Pbotosynthesis in healtby and rnst-affected tissnes. 15112

A survey of carnation diseases in soutb Sweden. 15144

Sting nematode on grape cuttings in Florida. 15168

PLANT GALLS
Physiological basis of gall formation in black-knot disease of Prunus. 15066

Albino Peridermium harknessii in ponderosa pine. 15153

PLANT GRAFTING
Transmission of apple mosaic and stem-pitting viruses tbrougb root grafts. 15126

PLANT GROWTH INHIBITORS
Factors in the production and stimulation of some antibiotics of fungal origin inhibiting tbe growtb of patbogenic fungi. 15140

Herbicidal control of tall larkspur. 15282

Inhibition of plant growth by halogenated benzoic acids. 15628

PLANT HARDINESS
The effect of storage molds on germination and vigor of canning peas. 15025

PLANT INJURIES
Soil treatments with broadcast or band applications of organopbosphorous or carbamate insecticides for prevention of wireworm damage to potatoes. 15227

Grasshopper damage on short-grass rangeland of tbe San Carlos Apacbe Indian Reservation, Arizona. 15247

Characterization of the plant damage problem by air pollutants in New Jersey. 15538

PLANT INSECT RESISTANCE
Relative effectiveness of resistance of field corn to tbe european corn borer, Pyrausta nubilalis, in crop protection and in popnlation control. 15229

PLANT METABOLISM
Uridine-R3 incorporation in tobacco infected by tobacco mosaic virus. 15190

Metabolite changes induced by cncumber mosaic virus in resistant and snsceptible strains of cowpea. 15217

Investigations on Dnrsban insecticide. metabolism of O,O-diethyl O-3,5,6-trichloro-2-pyridyl phospborothioate and 3,5,6-trichloro-2-pyridinol in plants. 15582

Prevention of photodynamic killing of fungal cells by carotenoids. 15620

Metabolism in vitro of phloridzin and otber compounds by Venturia inaequalis. 15627

PLANT MORPHOLOGY
Observations on the colonial morphology of leptospires. 15317

PLANT MUTATION
Phenotypic restoration of fertility in a male-sterile mutant by treatment witb gibberellic acid. 15629

PLANT NEMATODES
Scme observations on the number of root lesion nematodes necessary to cause injury to seedling onions. 15048

Sting nematode on grape cuttings in Florida. 15168

Stimulation of batching of the potato-root eelworm Heterodera rostocbiensis by ion excbange resins. 15254

Determination of nematode mortality. 15255

Field trials of new nematocides in 1960 for controlling root-knct nematodes. 15256

Control of plant-nematodes and weeds in bolly nurseries. 15257

Soil fumigation by injection and irrigation for the control of nematodes on hops. 15261

Host-parasite relationships of garden balsam and some nematodes. 15265

Species of root-lesion nematodes commonly associated with economic crops in the Delta of tbe U.A.R. 15267

New nematocides. 15268

Plant- parasitic nematodes associated with shortleaf pine sbowing symptoms of littleleaf. 15269

Preliminary studies on the control of nematodes in ontdoor rose plantings. 15270

Inflnence of oxygen supply on snrvival of plant parasitic nematodes in soil. 15272

A nematode (Meloidodera sp) on Douglas-fir mycorrhizae. 15275

Control of pathogenic fungi, nematodes, and weeds by preplanting chemical treatments. 15640

PLANT NUTRITION
Influence of nutrition, PH, soil temperature, and soil moistnre on Pbythium blight of bigbland bentgrass. 15139

Tree nutrition and fire blight development. 15151

PLANT PEST CONTROL
La lutte cbimique contre les insects nuisibles. (cbemical control of insect pests). ed. 3. sR951.15. 14906

PPC (Plant Pest Control) Manual. 15584

PLANT PEST RESISTANCE
The relative resistance to insect attack of three cabbage varieties at different stages of plant maturity. 15284

Seasonal sbifts in the relative resistance to insect attack of eigbt commercial cabbage varieties. 15285

PLANT PHYSIOLOGICAL DISEASES
Physiological factors in the etiology and alleviation of salt-indnced decline of roadside maples and pines. 15102

PLANT PHYSIOLOGY
Pbysiological basis of gall formation in black-knot disease of Prunus. 15066

The relative resistance to insect attack of three cabbage varieties at different stages of plant maturity. 15284

Metabolism in vitro of pbloridzin and otber compounds by Venturia inaequalis. 15627

PLANT PROTECTION
Protection of cucumber seedlings from stone fruit ringspot virus by 8-azaagnanine. 15099

PLANT PROTECTIVE DEVICES
A survey of green plants for antimicrobial substances. 15186

Repellancy of reflective alnminum to transient aphid viral vectors. 15189

Prevention of photodynamic killing of fungal cells by carotenoids. 15620

PLANT REGULATORS
Tbe effect of chlorinated C3 bydrocarbons on growth and amino acid prodnction of indigenous soil bacteria. 15000

The effect of growtb snbstances on Verticillium wilt of. 15181

Effect of growtb-regulating and other compounds on bacterial spot of pepper. 15219

Inbibition of plant growth by halogenated benzoic acids. 15628

Action and effectiveness of certain classes of herbicides. 15667

PLANT RESIDOES

PLANT RESIDUES
Eradication of soil fungi hy a combination of crop residue, flooding, and anaerobic fermentation. 15213

PLANT RESPIRATION
Respiration, photosynthesis, and dark fixation of C1402 hy healthy and rusted bean leaves. 15653

PLANT TEMPERATORE
Effects of time and temperature on rate of graft transmission of the Prunus ringspot virus. 15054

Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

Effects of temperature and light on plant susceptihility to cucumber mosaic virus hy aphid transmission. 15194

PLANT TRANSLOCATION
A difference in the translocahility of two viruses in hean plants. 15170

PLANTS
Accumulation of copper hy some Zamhian plants. 15641

PLAQUE
Plague characteristics of four classes of hovine viruses. 15374

PLASTICS
Plastic pots compared with clay pots for rearing white-fringed heetle larvae. 14857

PLEGA
Some notes on the life history of Plega hanksi (Neuroptera Mantispidae). 14845

PLEUROPNEUMONIA-LIKE ORGANISMS
The histopathologic characteristics of diseases producine inflamation of the air sacs in turkeys-a comparative study. 15324

Antihiotic resistance and mutation rates of mycoplasma. 15353

Serological studies of avian pleuropneumonia-like organisms (PPLO) with Edward's technigue. 15362

Studies of egg transmission of PPLO in chickens. 15363

Swine serum and COZ in the isolation of avian PPLO. 15364

PLOMS
Food and food products. tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. O-Phenylphenol and its sodium salt. 15593

PLUTELLA MACULIPENNIS
A hioassay technigue for determining the insecticidal activity of preparations containing Bacillus thuringiensis Berliner. 14960

POD MOTTLE (BEANS)
Serological studies of red node and pod mottle viruses. 15174

POISON GLANDS
Constitnents of Dufour's gland in Myrmecia gulosa. 14872

POISONING
Mammalian detoxification of insecticides. 14989

In vitro degradation of oxalate and of cellulose hy rumen ingesta from sheep fed halogeton glomeratus. 15390

Experimental water intoxication in calves. 15396

Pigweed (Amaranthus retroflexus). an oxalate-containing plant. 15404

Cassia occidentalis toxicosis in cattle. 15410

Vertehral hiopsy in cattle. 15445

Note on identification of azinphosmethyl in human tissues. and in figs. 15579

Mammalian detoxification of insecticides. 15602

Acute lead poisoning in swine. 15604

POISONOOS PLANTS
Cassia occidentalis toxicosis in cattle. 15410

The etiology of legume hloat-nonvolatile acids. 15457

POLLINATION
Plant-to-plant transfer of stone fruit ringspot virns in sguash hy pollination. 15035

POLYBOR 3
Feed additives for control of house fly larvae in livestock feces. 15503

POLYETHYLENE
Use of polyethylene hags for corn root infection stndies. 15133

Polyethylene liners and fungicides for peaches and nectarines. 15526

POLYHEDROSES
Nucleic acids extracted from the virus polyhedra of the silkworm, Bomhyx mori (Linnaeus). 14850

Interference hetween cytoplasmic-polyhedrosis viruses of the silkworm, Bomhyx mori (Linnaeus), and of the pine caterpiller, Dendrolimus spectahilis (Butler). 14852

Fine structure of some insect viruses. 14860

Demonstration of nuclear polyhedrosis in Bomhyx mori (Linnaeus) hy fluorescent antihody technigne. 14903

Adaption of a nnclear-polyhedrosis virns of Trichiocampns viminalis (Fallen) to larvae of Trichiocampns irregnlatis (Dyar). 14956

A cytoplasmic polyhedrosis of Cactohlastis cactornm (Berg). 14963

The influence of physical stress on growth and nnclear polyhedrosis of Trichoplusia ni (Huehner). 15242

POLYMERS
Infrared ahsorption spectra and polymeric strnctnres of three s-Triazine herhicides and their metaholites. 15657

POLYPLOIDY
Induced polygenic mntations in hexaploid wheats. 15621

POLYPORUS TOMENTOSOS
Fluorescent antihody technigne for detection of Polyporns tomentosus. 15104

POLYSACCHARIDES
Characterization of Vihrio fetus antigens. IV. Stndy of polysaccharide-antihody reactions hy a rapid slide gel diffusion technigue. 15310

POPULATION
Critical application of logistic principle on the lahoratory population of Anthrenus flavipes Lec. 14856

Population trends and movement of Corynehacterinm flaccumfaciens var. aurantiacnm in tolerant and susceptihle heans. 15172

PORTHETRIA
Gypsy moth defoliation. 15235

PORTOGAL
Note on identification of azinphosmethyl in hnman tissues. and in figs. 15579

POTASSIOM
Studies on reticulo-rumen sodinm and potassinm concentrations and electrical potentials in sheep. 15672

POTASSIOM PHOSPHATE
In vitro increase in virus infectivity. iI. 15221

POTATOES
Steroid alkaloids in the disease resistance of white potato tuhers. 14995

Serology of the potato spindle tnher virus. 15009

Effect of incnhation temperature on length and infectivity

of potato virus X particles in four host species. 15068

Symptomless hosts of the potato spindle tuber virus. 15146

Base composition of soluble ribonucleic acid from Phytophthora infestans. 15149

Soil treatments with broadcast or band applications of organophosphorous or carbamate insecticides for prevention of wireworm damage to potatoes. 15227

Stimulation of hatching of the potato-root eelworm Heterodera rostochiensis by ion exchange resins. 15254

Chemotherapeutic control of a root-knot nematode. 15258

Effect of major and minor gene interaction on adaptive parasitism in phytophthora infestans. 15631

Rates of phenolic synthesis in potato roots resistant and susceptible to Veritcillum albo-atrum.
patil, s s. 15654

PODLTRY
The control of poultry lice and mites with several organic incecticides. 15240

Report on the pullcrum disease testing results for the 32nd northeastern conference on avian diseases. 15312

Physicochemical properties of the infectious bursal agent (IBA). 15326

Newcastle disease immunity in broilers and caponettes vaccinated with killed-virus and live-virus vaccines. 15349

Escherichia coli serotypes isolated from salpingitis and chronic respiratory disease of poultry. 15373

Detection of bacterial contaminants in live virus poultry vaccines. 15384

Improved staining method for leucocyte count of poultry. 15444

Coexistence of infectious bronchitis and infectious laryngotracheitis. 15451

Ingestion of Ammi visnaga seeds and photosensitization - The cause of vesicular dermatitis in fowls. 15478

Effects of vitamin-A deficiency and high-level chlortetracycline on experimental candidiasis of turkeys. 15479

Experimental photosensitization by spring parsley (Cymopterns watsonii) in chicks. 15494

Revaccination of chickens against Newcastle disease by vent, wing-web, and intramuscular routes. 15495

The spectrophotofluorometric determination of buguinolate in poultry tissue and eggs. 15511

Field trials with hygromycin as an anthelmintic in poultry. 15512

Toxicity of topically applied fats and oils. 15520

A survey to determine the salmonella contamination rate in livestock and poultry feeds. 15535

PODLTRY HATCHERIES
Hatchery spread of pullorum disease through debeaking. 15389

Hatchery sanitation as a control measure for aspergilossis in fowl. 15496

Hatchery sanitation. 15497

POWDERY MILDEW (PEACHES)
The orchard development of peach powdery mildew. 15216

PRECIPITIN TEST
Detection of precipitins against Brucella ovis. 15406

PREDACEOUS INSECTS
Estimation of Dendroctonus brevicomis (Coleoptera-Scolytidae) mortality caused by insect predators. 14806

Seasonal changes in the abundance of certain aphids and their predators in =giza.. 14854

Biotic potential of phytoseiid mites fed on virus-infected citrus red mites. 14950

PREDATORY ANIMALS
Preliminary report on the feeding pattern of two species of fish in a rice field habitat. 14988

PREVENTIVE MEDICINE
Aureomycin chlortetracycline as a preventive for experimental synovitis in chickens. 15466

PRINCE EDWARD ISLAND
Effect of soil treatments of heptachlor and parathion on predators and parasites of root maggots attacking rutabagas on Prince Edward Island. 15249

PROMAZINE HYDROCHLORIDE
Tranquillising horses with promazine hydrochloride. 15291

PROPERTIES
Physicochemical properties of the infectious bursal agent (IBA). 15326

PROTEINS
Changes in haemolymph lipoproteins during locust flight. 14914

Protein and isozyme patterns of sweet potatoes as related to acquired immunity. 15650

Some biochemical effects of alkylating agents. 15676

PRUNING
Time of pruning and infection of peach trees by Psendomonas syringiae. 15042

PRUNUS
Physiological basis of gall formation in black-knot disease of Prunus. 15066

Cross-transmission studies with citrus and prunus viruses. 15155

Control of the eastern tent caterpillar, Malacosoma americanum (Fabricius), by distribution of spores of two species of Clostridium. 15226

PSEUDALETIA UNIPUNCTA
The epizootiology of virus diseases in field populations of the armyworm, Pseudaletia unipuncta (Haworth). 14964

PSEUDOCOWPOX
Bovine papular stomatitis, pseudo-cow-pox and milker's nodules. 15489

PSEUDOMONAS
Time of pruning and infection of peach trees by Pseudomonas syringiae. 15042

PSEUDOMONAS AERUGINOSA
The mechanisms of pathogenicity of Pseudomonas aeruginosa (Schroeter) Migula. i. The pathogenicity of strain N-06 for larvae of the greater wax moth, Galleria mellonella (Linnaeus). 14911

PSEUDOMONAS PHASEOLICOLA
Analysis of proteins and enzymes of the interaction between Phaseolus vulgaris and Pseudomonas phaseolicola (halo blight of beans). 15642

PSEUDOMONAS SESAMI
A second pathogenic race of Pseudomonas sesami. 15199

PSEUDOMONAS SYRINGAE
Leaf spot of guar caused by Pseudomonas syringae in the United States. 15148

PSEUDOPLEA
Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

PSEUDOTSUGA
Effectiveness of various formulations of five insecticides on insects infesting douglas-fir logs. 15250

PSEUDOTSUGA MENZIESII

PSEUDOTSUGA MENZIESII
A study of the flight of the Douglas-fir beetle Dendroctonus pseudotsugae Hopk. (Coleoptera: Scolytidae) III. Flight capacity. 14853

A nematode (Heloidodera sp) on Douglas-fir mycorrhizae. 15275

Determination of Zectran residues in aerial forest spraying. 15576

PSOROPHORA CONFINNIS
Panel: opposing philosophies in mosquito control technology: emphasis on control of adult mosquitoes in Florida. 14980

PSOROSIS (ORANGES)
Failure of psorosis virus to protect against citrus variegation virus. 15028

PSYCHODIDAE
New technique for preparation and study of moth flies. 14908

PSYLLA PYRICOLA
A decline condition in pears induced by pear psylla. 15244

PUBLIC HEALTH
Rachel Carson influence gains momentum as book appears. 15549

Wanted' An image for an industry. 15668

PUCCINIA
The possible use of pine needles as spore traps. 15077

Technique for germinating uredospores of Puccinia striiformis. 15681

PULLORUM DISEASE
Report on the pullorum disease testing results for the 32nd northeastern conference on avian diseases. 15312

Report of the Committe on Nomenclature and Reporting of Disease, Northeastern Conference on Avian Disease, June, 1962. 15340

Hatchery spread of pullorum disease through debeaking. 15389

PULMONARY ADENOMATOSIS
Pulmonary adenomatosis of sheep-metastasizing bronchiolar tumors. 15347

PUPAE
Effect on adult emergence of whole and partial X-irradiation of pupae of the housefly, Musca domestica nebulo. 14926

PURIFICATION
Purification of pea enation mosaic virus. 15067

PURINES
Quantitative studies on purine excretion in the greater wax moth, Galleria mellonella. 14966

PYRALIDAE
A new genus and a new species of Pyraustinae (Lepidoptera: Pyralidae). 14834

PYRAUSTA
Relative effectiveness of resistance of field corn to the european corn borer, Pyrausta nubilalis, in crop protection and in population control. 15229

PYRAUSTA NUBILALIS
Note: Elimination of microsporidiosis in laboratory-reared European corn borers by the use of heat. 14939

PYRAUSTINAE
A new genus and a new species of Pyraustinae (Lepidoptera: Pyralidae). 14834

PYRETHRUM
Studies on fine-particle, coarse-particle, and concentrated aerosols. 14948

PYRILLA PERPUSILLA
Viability of the chalcid parasite Tetrastichus pyrillae Crawford from the host Pyrilla perpusilla Walker egg. 14829

PYTHIUM
Potential pathogenicity of Pythium isolates from forest nurseries. 15204

PYTHIUM ULTIMUM
Effect of carbon source and calcium on growth of Pythium ultimum. 15638

QUATERNARY AMMONIUM COMPOUNDS
Use of chromatography for selecting systemic quaternary ammonium fungicides. 15660

QUERCUS ELLIPSOIDALIS
Oligomycin treatments of oak wilt in northern pin oaks. 15154

QUINONES
Quinoid secretions in grain and flour beetles. 15531

RABBIT SEPTICEMIA
Lymphosarcoma in the rabbit. a case report and general review. 15487

RABBITS
Experimentally induced bovine psoroptic acariasis in a rabbit. 15407

Lymphosarcoma in the rabbit. a case report and general review. 15487

Studies on infection and immunity with the lungworm, Dictyocaulas viviparus (Bloch). i. active immunization of guinea pigs and rabbits. 15488

RABIES
Isolation of Listeria monocytogenes from brains of rabies-negative animals. 15438

RABIES VIRUS
Potency testing of low egg passage modified live-virus rabies vaccines. 15293

RACHEL CARSON
Rachel Carson influence gains momentum as book appears. 15549

RADAR
Radar observations of locust swarms. 14836

RADIATION
Exposure of house flies and oriental rat fleas on a high-altitude balloon flight. 14962

Experimental hypopituitarism in swine: a stereotaxic method of inducing the condition with beta irradiation. 15455

Light absorption by living mycelia of fungi before and after exposure to near-ultraviolet radiation. 15633

RADIOACTIVE TRACERS
Distribution and fate of 4-C14 cholesterol in the adult male American cockroach. 14896

Uptake of radioactive ethyl NN-DI-N-PROPYLTHIOCARBAMATE (EPTC-35 S) and translocation of sulphur-35 in various crops. 14992

Investigations on Unrspan insecticide. metabolism of O,O-diethyl O-3,5,6-trichloro-2-pyridyl phosphorothioate and 3,5,6-trichloro-2-pyridinol in plants. 15582

RADIOELEMENTS
The measurement of bovine thyroid activity using low dosages of radioactive iodine I131. 15297

RADISHES
Cercosporella leaf spot-resistant radish greens. 15046

Bacterial black spot of radish. 15176

RAISINS
Food additives permitted in food for human consumption. Ethion. 15595

RASPBERRIES
Reduction of post-harvest decay in raspberries with SO2. 15523

RATS
A sensitive procedure for urinary p-nitrophenol determination as a measure of exposure to parathion. 15559

RATTLE DISEASE (TOBACCO)
Trichodorus christiei as a vector of potato corky ringspot (tobacco rattle) virus. 15273

RAY SPECK (CHRYSANTHEMUM)
Stemphylium ray speck of chrysanthemum. 15195

RED CLOVER
Crown and root rots of alfalfa and red clover and the relative prevalence of associated fungi. 15007

Bean yellow mosaic virus in detached leaves of red clover plants. 15038

Genetics of resistance to Erysiphe polygoni in Trifolium pratense. 15193

RED NODE (BEANS)
Serological studies of red node and pod mottle viruses. 15174

RED WATER DISEASE
Epizootic hemorrhagic disease in white-tailed deer- characteristic of the South Dakota strain of virus. 15436

REDPEPPERS (VEGETABLE)
Effect of growth-regulating and other compounds on bacterial spot of pepper. 15219

REDUCTASES
Pyridine nucleotide-linked enzymatic reduction of triose, pentose, and hexose phosphates associated with rust infection. 15625

REPORTS
A preliminary report on a potential new mosquito control weapon. 14982

REPRODUCTION
A study of the capability of the rice weevils Sitophilus sasakii and S. oryzae to reproduce parthenogenetically. 14816

Histology of the reproductive tracts and transmission of sperm in the corn earworm, Heliothis zea. 14871

An evaluation of the rate of reproduction of the two-spotted spider mite reared on gibberellin-treated bean plants. 14876

Mating studies of the pink bollworm, Pectinophora gossypiella (Lepidoptera: Gelechiidae), based on presence of spermatophores. 14880

Mating frequency of female pink bollworms collected from light traps. 14884

The nervous system of certain abdominal segments and the innervation of the male reproductive system and genitalia of Hyalophora cecropia. (Lepidoptera: Saturniidae). 14907

Sterol storage and reproduction in the house fly. 14922

Sperm depletion in chemosterilized and normal males of the yellow fever mosquito, Aedes aegypti. 14972

Multiplication and movement of Wisconsin pea streak virus in pea. 15118

REPRODUCTIVE ORGANS
Gametogenesis in the house fly, Musca domestica. 14879

RESIDUES
Safety and tissue residue evaluations in swine fed rations containing chlortetracycline, sulfamethazine, and penicillin. 15411

RESPIRATORY DISEASES
The isolation of infectious bovine rhinotracheitis virus from cattle affected with conjunctivitis-observations on the experimental infection. 15313

Isolation of an unidentified myxovirus from chickens with a respiratory disease. 15320

Isolation and properties of bovine herpesvirus from a calf with respiratory disease and keratoconjuctivitis. 15323

RETICULUM
Studies on reticulo-rumen sodium and potassium concentrations and electrical potentials in sheep. 15672

RHIZOCTONIA
Storage and germination of cuttings and soil microorganisms as they relate to the pineapple disease of sugar cane. 15016

Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

Lesion maturation, fungal development, and distribution of endopolygalacturonase and cellulase in Rhizoctonia infected bean hypocotyl tissues. 15207

Formation of the basidial stage of some isolates of Rhizoctonia. 15648

RHIZOCTONIA SOLANI
Effect of pentachloronitrobenzene. 15178

Nuclear condition and division in vegetative hyphae of Rhizoctonia solani. 15644

Pectin trans-eliminase and polygalacturonase production by Rhizoctonia solani and other fungi. 15645

RHIZOSPHERE
New medium for the isolation of Thielaviopsis basicola on dilution plates from soil and rhizosphere. 15150

RHYNCHOPHORUS
On the life history and habits of the palm weevil, Rhynchophorus palmarium. 14820

RHYSSA PERSUASORIA
Parasitism of Sirex noctilio F by Schlettererius cinctipes (Cresson) (Hymenoptera: Stephanidae). 14965

RIBOFLAVIN
Riboflavin-mediated photodecompsition of amitrole in relation to chlorosis. 15277

RIBONUCLEIC ACID
Effects of hormones and injury on RNA synthesis in saturniid moths. 14861

Nucleotide composition of RNA in healthy and mildew-infected leaves of barley. 15120

Base composition of soluble ribonucleic acid from Phytophthora infestans. 15149

RICE
Descriptions of larval and pupal stages of four lepidopterous rice borers in Malaysian Borneo (Sarawak). 14945

Preliminary report on the feeding pattern of two species of fish in a rice field habitat. 14988

Preliminary note on transmission of a virus disease resembling tungro of rice in India and other virus-like symptoms. 15159

Effect of sugarcane borer infestation on the yield and grade of corn. 15233

Notice of filing of petition regarding pesticides. 15597

RICE STRAW
Notice of filing of petition regarding pesticides. 15597

RICKETTSIA
Selective staining of Rickettsia ruminantium in tissue sections. 15510

RINDERPEST VIRUS
An indirect gel diffusion precipitation test for the detection of rinderpest antibody in convalescent cattle. 15492

RING SPOT (FRUIT)
Plant-to-plant transfer of stone fruit ringspot virus in squash by pollination. 15035

RING SPOT (PRUNUS)
Effects of time and temperature on rate of graft transmission of the Prunus ringspot virus. 15054

RING SPOT (TOBACCO)

RING SPOT (TOBACCO)
Additional evidence on soil transmission of tobacco ringspot virus. 15076

Symptoms of tobacco ringspot virus on papaya. 15129

A difference in the translocability of two viruses in bean plants. 15170

RINGSPOT (CARNATION)
Immune response to a plant virus bound or serologically precipitated in agar. 14999

ROBINIA PSEUDOACACIA
Parasites and predators associated with five species of leaf-mining insects in black locust. 14814

RODOLIA
Interference with the biological control of cottony-cushion scale by insecticides and attempts to re-establish a favorable natural balance. 15224

ROWNEL
Field tests with insecticides for control of lone star ticks on cattle. 15502

ROOT KNOT (COTTON)
Observations on cotton root-knot nematode in grain sorghum in west Texas. 15266

ROOT ROT
Crown and root rots of alfalfa and red clover and the relative prevalence of associated fungi. 15007

ROOT ROT (CITRUS)
Dry root rot of citrus induced by ammonia excesses. 14998

ROOT ROT (SAFFLOWER)
Influence of irrigation and soil infestation with strains of Phytophthora dreschleri on root rot resistance of safflower. 15222

ROOTS
Purification of viruses from pea roots. 15052

Fungi associated with Gladiolus roots under continuous cropping conditions. 15088

Peroxidases and their relation to vascular browning in banana roots. 15117

Transmission of apple mosaic and stem-pitting viruses through root grafts. 15126

The effect of corn root exudate on the growth of five fungi associated with corn roots. 15132

Use of polyethylene bags for corn root infection studies. 15133

Rates of phenolic synthesis in potato roots resistant and susceptible to Verticillum albo-atrum.
patil, s s. 15654

ROT (LEMONS)
A new method of applying biphenyl for the control of citrus fruit rots. 15069

ROT (ORANGES)
A new method of applying biphenyl for the control of citrus fruit rots. 15069

ROUS SARCOMA VIRUS
Size, score and speed of development of tumors in chickens in response to subcutaneous inoculations with rous sarcoma virus. 15379

Some factors affecting Rous sarcoma virus activity in the embryonated egg inoculated by the yolk - sac route. 15420

RUMINANTS
Viral encephalomyelitis of equines and domestic ruminants in the Near East. i. 15350

Notice of filing of petition for food additive biuret. 15483

RUST (ASPARAGUS)
Control of asparagus rust with a mixture of maneb and nickel sulfate. 15109

RUST (BEANS)
An outbreak of broadbean diseases in Iran. 15091

Photosynthesis in healthy and rust-affected tissues. 15112

Temperature conversion of rust response of bean. 15167

Effect of removing the terminal bud of bean plants upon protein changes after infection by the bean rust fungus. 15192

Properties of purified acid phosphatases from healthy and rust-infected bean leaves. 15652

Respiration, photosynthesis, and dark fixation of C1402 by healthy and rusted bean leaves. 15653

RUST (PINUS ELLIOTTII)
Resistance to fusiform rust in slash pine as shown by artificial inoculation. 15090

RUST (PINUS PONDEROSA)
Albino Peridermium harknessii in ponderosa pine. 15153

RUST (PINUS TAEDA)
Antibiotic treatment of young loblolly pines infected with fusiform rust. 15050

RUST (PINUS)
Pine cone rust in the highlands of Guatemala. 15169

RUST (WHEAT)
Photosynthesis in healthy and rust-affected tissues. 15112

Factors affecting field performance of nickel salt plus dithiocarbamate fungicide mixtures for the control of wheat rusts. 15201

Pyridine nucleotide-linked enzymatic reduction of triose, pentose, and hexose phosphates associated with rust infection. 15625

RUTABAGAS
Effect of soil treatments of heptachlor and parathion on predators and parasites of root maggots attacking rutabagas on Prince Edward Island. 15249

S-TRIAZINES
Infrared absorption spectra and polymeric structures of three s-Triazine herbicides and their metabolites. 15657

SACBROOD
Notes: Electron microscopic investigation of sacbrood of the honey bee. 14865

SACCHARIN
Effect of growth-regulating and other compounds on bacterial spot of pepper. 15219

SAINT LOUIS ENCEPHALITIS
St. Louis encephalitis vector studies in Houston, Texas. 14983

SALINE WATER
Insecticidal and natualistic control chironomid larvae in Lake Dalwigk, Vallejo, California. 14919

SALIVA
The relation between the composition of parotid saliva and mixed saliva in sheep during the induction of sodium deficiency. 15659

SALMONELLA
Salmonella and Shigella infections in bats in selected areas of Colombia. 15316

The problem of Salmonella organisms in animal by-products and feeds. 15360

A survey to determine the salmonella contamination rate in livestock and poultry feeds. 15535

Destruction of Salmonella during slaughtering of swine; importance of scalding. 15536

Detection and identification of salmonella from dried whole egg, dried egg yolk, and dried egg white: report of a collaborative study. 15537

SALMONELLA BACTERINS
The emergence of resistant strains of Salmonella typhimurium in the tissues and alimentary tracts of chickens following the feeding of an antibiotic. 15370

SALMONELLA TYPHIMURIUM
The effect of the use of antibacterial drugs, particularly as food additives, on the emergence of drug-resistant strains of bacteria in animals. 15467

SALMONELLOSIS
The problem of Salmonella organisms in animal by-products and feeds. 15360

SALPINGITIS
Escherichia coli serotypes isolated from salpingitis and chronic respiratory disease of poultry. 15373

SAND
Persistence of two systemic carbamate insecticides in three types of soils. 15541

SANITATION
Hatchery sanitation as a control measure for aspergilossis in fowl. 15496

Hatchery sanitation. 15497

Destruction of Salmonella during slaughtering of swine; importance of scalding. 15536

SAP
Some problems associated with weighing aphids that have fed after starving, as a method of measuring intake of plant sap. 14943

SARCOMA
An epizootic of histiocytic sarcomas in chickens induced by a cell-free agent. 15430

Study of chicken sarcoma (strain 13) by vent exposure. 15471

Study of chicken sarcoma (strain 13) placed in the bursa of Fabricius. 15472

Antibiotic streptogan and process for preparation. patent 3,334,015. 15671

SARCOPHAGIDAE
Rearing and biology of Wohlfahrtia vigil (Diptera: Sarcophagidae). 14875

SATURNIIDAE
Effects of hormones and injury on RNA synthesis in saturniid moths. 14861

SCAB (CUCUMBERS)
Anthracnose, scab, and soil rot of cucumbers. 15131

SCAB (PECAN)
An evaluation of certain fungicide - adjuvant combinations for control of pecan scab. 15012

SCAB (PECANS)
Organic fungicides for control of pecan scab. 15013

SCABIES
Experimentally induced bovine psoroptic acariasis in a rabbit. 15407

SCENT GLANDS
Chemical releases of social behavior-IV. The hindgut as the source of the odor trail pheromone in the neotropical army ant genus Eciton. 14807

SCHISTOCERCA GREGARIA
Radar observations of locust swarms. 14836

Metabolism of malathion in desert locust. 1. activation of malataion into an anticholinesterase. 14918

SCHIZAPHIS
Boll weevil survival in Carolinas higher than in 1961. 15231

SCLEROTIUM ROLFSII
Effects of plant-bed applications of 2,6-dichloro-4-nitroaniline on control of sclerotial blight and on plant production in sweet potatoes. 15014

Seedling disease of wheat caused by Sclerotium rolfsii. 15098

SCOLOPENDRA AMAZONICA
The skeletomuscular mechanism of the so-called anal legs in the centipede Scolopendra amazonica (Scolopendridae). 14897

SCOLYTIDAE
Estimation of Dendroctonus brevicomis (Coleoptera-Scolytidae) mortality caused by insect predators. 14806

Observations on the effect of nematodes on Ips confusus (LeConte) and other bark beetles. 14928

SCOLYTUS
Nematode parasites and associates of the smaller European elm bark beetle, Scolytus multistriatus (Marsham). 14947

SCOURS
Pathogenis and prevention of infectious diarrhea (scours) of newborn calves. 15452

SEDIMENTATION
Water pollution control and abatement. tD420.w45. 15548

SEED GERMINATION
The effect of storage molds on germination and vigor of canning peas. 15025

Effect of virus yellows on yield and quality of sugar beet seed. 15080

Technigne for germinating uredospores of Puccinia striiformis. 15681

SEED POTATOES
Evidence of "running out" in non-certified potatoes used for seed. 15111

SEED TREATMENT
Seedling disease of wheat caused by Sclerotium rolfsii. 15098

Studies on the control of black rot of crucifers by treating seeds with antibiotics. 15100

Evaluation of seed treatment with 1,4-dichloro-2,5-dimethoxybenzene as a cotton seedling disease control measure. 15158

SEED VIABILITY
Effect of moisture content and length of storage period upon germination percentage of seeds of corn, wheat, and barley free of storage fungi. 15524

SEED-BORNE PLANT DISEASES
Maintaining virus-free cultivars of peach in Michigan. 15026

Seed transmission of bean mosaic viruses. 15130

A seed-borne bean virus of wide host range. 15185

SEEDLINGS
Variability of seedling clones of citron as indicators of exocortis virus of citrus. 14997

Some observations on the number of root lesion nematodes necessary to cause injury to seedling onions. 15048

Microorganisms on cucumber seedlings. 15107

Seasonal fluctuations in susceptibility of young elm seedlings to Dutch elm disease. 15187

SEEDS
Longevity of Xanthomonas malvacearum in dried cotton plants and its signicance in dissemination of the pathogen on seed. 15202

Ingestion of Ammi visnaga seeds and photosensitization - The canse of vesicular dermatitis in fowls. 15478

SELENIUM
Sulfur-selenium-vitamin E interrelations in ovine nutrition. 15330

Pharmacology and toxicology of carbon tetrachloride in the sheep. iV. reduction and augmentation of toxicity to sheep. 15397

SEMEN

SEMEN
Antibiotic mediums for the isolation of vibrios from bull semen. 15301

SENECIO JACOBAEA
Food-plant spectrum and elimination of disease of cinnabar moth larvae, Hypocrita jacobaeae (L.) (lepidoptera: Arctiidae). 15276

SEROLOGICAL TESTS
Serology of the potato spindle tuber virus. 15009

Purification, serology, and properties of a new cowpea virus. 15103

Serological studies of red node and pod mottle viruses. 15174

Serological investigation in French cattle; research on hemagglutination inhibiting antibodies due to myxovirus parainfluenza-3. 15338

Serological studies of avian pleuropneumonia-like organisms (PPLO) with Edward's technique. 15362

SERUM
Antihost serum improves plant virus purification. 15062

Swine serum and CO2 in the isolation of avian PPLO. 15364

The influence of terephthalic acid on oxytetracycline serum levels in chickens, Studies on mode of action, I. 15442

SERUM ALBUMIN
Exterotoxemia of sheep. II. distribution of I131 radioiodinated serum albumin in brains of Clostridium perfringens type D intoxicated lambs. 15376

SERUM NEUTRALIZATION TEST
Studies on avian encephalomyelitis. I The use of a serum -neutralization test in the detection of immunity levels. 15334

SESAMIA INFERENS
Descriptions of larval and pupal stages of four lepidopterous rice borers in Malaysian Borneo (Sarawak). 14945

SEX
Effect of diet on aortic ruptures in turkeys induced by diethylstilbestrol. 15304

SEX ATTRACTANTS
Sex pheromones of noctuid moths. VIII. Orientation to light by pheromone-stimulated males of Trichoplusia ni (Lepidoptera: Noctuidae). 14881

Sex attractant of the black carpet beetle. 14954

SEX BEHAVIOR
Stimuli provided by courtship of male Drosophila melanogaster. 14859

Behaviour and random mating. 14931

SEX DETERMINATION
Sexing of Mexican fruit flies. 14946

SG 67
Control of the snake mite (Ophionyssus natricis), other mites, and certain insects with the sorptive dust, SG 67. 15507

SHALLOTS
Control of diseases of shallots. 15521

SHEEP
Sulfur-selenium-vitamin E interrelations in ovine nutrition. 15330

Pulmonary adenomatosis of sheep-metastasizing bronchiolar tumors. 15347

Enzootic nasal adenocarcinoma in sheep. 15357

Exterotoxemia of sheep. II. distribution of I131 radioiodinated serum albumin in brains of Clostridium perfringens type D intoxicated lambs. 15376

Exterotoxemia of sheep. I. Effects of Clostridium perfringens type D toxin on the brains of sheep and mice. 15377

Enterotoxemia of sheep. III. Clostridium perfringens type D antitoxin titers of normal, nonvaccinated lambs. 15378

In vitro degradation of oxalate and of cellulose by rumen ingesta from sheep fed halogeton glomeratus. 15390

Placental pathology of sheep with vibiosis. 15392

Pharmacology and toxicology of carbon tetrachloride in the sheep. iV. reduction and augmentation of toxicity to sheep. 15397

Polyarthritis in sheep. I. Description of the disease and experimental transmission. 15408

Polyarthritis in sheep. II. Characterization of the causative virus. 15409

Contribution to the study of ovine listeriosis and immunoprophylaxis against the disease in France. 15414

Immune response to sheep erythrocytes with cytoxan and hybaroxia. 15465

Immunisation of sheep with multi-component clostridial vaccines. 15469

Anthelmintic activity of an organic phosphate in cattle and sheep. 15515

Toxicologic effects of a phosphorothioic acid insecticide in sheep. 15609

The relation between the composition of parotid saliva and mixed saliva in sheep during the induction of sodium deficiency. 15659

Studies on reticulo-rumen sodium and potassium concentrations and electrical potentials in sheep. 15672

SHELLFISH
Simultaneous electron capture - microconlometric detection for qualitative and quantitative pesticide analysis. (in: Gulf Coast Shellfish Sanitation Research Center. technical Memorandum (GCSSEC FY) 66 -2.). 15583

SHIPPING FEVER
Studies on shipping fever of cattle. II. Prevalence of Pasteurella species in nasal secretions from normal calves and calves with shipping fever. 15387

SIGATOKA (BANANAS)
Deposit rate and spray oil composition in relation to phytotoxicity and Sigatoka disease control on banana leaves. 15022

SILAGE
Determination of Niagara NIA-10242 and its phenol degradation product in corn silage and milk and determination of other carbamates by GLC of their thiophosphoryl derivatives. 15552

SILT
Sweetpotato soil, rot development in Olivier silt loam soil as affected by annual applications of lime or sulfur over a seven-year period. 15123

SIMAZINE
Phosphorus fertilization and the phytotoxicity of simazine. 15613

SIMULIIDAE
Feeding behavior and host preferences of some black flies (Diptera: Simuliidae) in Wisconsin. 14851

SINUSITIS
Egg transmission of infectious sinusitis in naturally infected turkeys. 15394

SIREX NOCTILIO
Parasitism of Sirex noctilio F by Schlettererius cinctipes (Cresson) (Hymenoptera: Stephanidae). 14965

SITONA CYLINDRICOLLIS
Preliminary laboratory tests utilizing Beauveria bassiana (Balsamo) Vuillemin on Calomycterus setarius Roelofs. 15234

SITOPHILUS
A study of the capability of the rice weevils Sitophilus sasakii and S. oryzae to reproduce parthenogenetically. 14816

SKIN
Toxicity of topically applied fats and oils. 15520

SLAUGHTERING
Destruction of Salmonella during slaughtering of swine; importance of scalding. 15536

SLUGS
Transmission of downy mildew of lima beans by slugs. 15218

SMUT (OATS)
Identification and distribution of oat smuts of the Southeastern United States. 15114

SNAKES
Control of the snake mite (Ophionyssus natricis), other mites, and certain insects with the sorptive dust, SG 67. 15507

SODIUM
The relation between the composition of parotid saliva and mixed saliva in sheep during the induction of sodium deficiency. 15659

Studies on reticulo-rumen sodium and potassium concentrations and electrical potentials in sheep. 15672

SODIUM ARSENITE
Action and effectiveness of certain classes of herbicides. 15667

SODIUM BICARBONATE
Method for treating animals infested with pests of the phylum arthropoda. patent 3,367,831. 15508

SODIUM CHLORIDE
Physiological factors in the etiology and alleviation of salt-induced decline of roadside maples and pines. 15102

Salt injury to trees. 15626

SODIUM CHLOROACETATE
Biological decomposition of herbicides in soil. i. mono-and trichloroacetate and dichloropropionate. 15543

SODIUM HEXADECYL SULFATE
Method for treating animals infested with pests of the phylum arthropoda. patent 3,367,831. 15508

SODIUM SALTS
Food and food products. tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. O-Phenylphenol and its sodium salt. 15593

SOIL AIR
A mechanism for continuous production of hydrogen sulfide in soils submerged in water. 15664

SOIL BACTERIA
The effect of chlorinated C3 hydrocarbons on growth and amino acid production of indigenous soil bacteria. 15000

SOIL CHEMISTRY
Factors affecting the vapor loss of EPTC from soils. 15662

A mechanism for continuous production of hydrogen sulfide in soils submerged in water. 15664

SOIL CONTAMINATION
The behavior of insecticides in forest soils. 15539

Persistence of two systemic carbamate insecticides in three types of soils. 15541

The behavior of DDT and Zectran on a forest soil. 15544

Methods for extracting insecticides from soil. 15545

SOIL FUMIGATION
An evaluation of two fungicides as soil treatments with and without herbicide for tomato fruit control. 15029

The efficacy of various fumigants in controlling Verticillium wilt in south-central Washington. 15184

Soil fumigation by injection and irrigation for the control of nematodes on hops. 15261

SOIL FUNGI
Action of soil fungicides. IV. changes in the spectrum of soil fungi. V. sensitivity of soil organism in vitro. 15041

Influence of some representative herbicidal chemicals upon the growth of some soil fungi. 15134

New medium for the isolation of Thielaviopsis basicola on dilution plates from soil and rhizosphere. 15150

Eradication of soil fungi by a combination of crop residue, flooding, and anaerobic fermentation. 15213

SOIL INSECTS
Soil fauna research in the forest of Maures (Var). the dale of Fournel (Coleoptera). 14822

SOIL MICROORGANISMS
Storage and germination of cuttings and soil microorganisms as they relate to the pineapple disease of sugar cane. 15016

Biological decomposition of herbicides in soil. i. mono-and trichloroacetate and dichloropropionate. 15543

SOIL MOISTURE
Influence of nutrition, PH, soil temperature, and soil moisture on Phythium blight of highland bentgrass. 15139

SOIL TEMPERATURE
Influence of nutrition, PH, soil temperature, and soil moisture on Phythium blight of highland bentgrass. 15139

SOIL TREATMENT
An evaluation of two fungicides as soil treatments with and without herbicide for tomato fruit control. 15029

SOIL TREATMENTS
Soil treatments with broadcast or band applications of organophosphorous or carbamate insecticides for prevention of wireworm damage to potatoes. 15227

Effect of soil treatments of heptachlor and parathion on predators and parasites of root maggots attacking rutabagas on Prince Edward Island. 15249

SOILS
Preliminary study on some of the factors affecting control of western corn rootworm larvae with soil insecticides. 15246

Influence of oxygen supply on survival of plant parasitic nematodes in soil. 15272

Degradation of carbamate herbicides in soil. 15567

Loss of chlorinated hydrocarbon insecticides from soil surface in the field. 15573

Factors affecting the vapor loss of EPTC from soils. 15662

Movement of nonvolatile, diffusible fungicides through columns of soil. 15669

A vapor trapping apparatus for determining the loss of EPTC and other herbicides from soils. 15684

SOLENOPSIS
Infestation of the imported fire ant, Solenopsis saevissima v. richteri, at Fort Benning, Georgia. 14981

SOLVENTS
Pesticides' mixing assistants. 15663

SOOTY BLOTCH (APPLES)
Spray programs and the control of sooty blotch of apples. 15031

SORGHUM
Effect of sugarcane borer infestation on the yield and grade of corn. 15233

Observations on cotton root-knot nematode in grain sorghum in west Texas. 15266

Dicamba and its metabolite. notice of establishment of temporary tolerance. 15591

SOUTH AMERICA

SOUTH AMERICA
Japygidae of South America. 4' The genus Austrjapyx and descriptions of new species. 14843

SOUTHERN BLIGHT (TOMATOES)
Calcium nitrate for field control of tomato southern blight in South Carolina. 15183

SOYBEANS
Control of brown stem rot of soybeans with corn-soybean rotations. 15045

Effect of s-triazine and phenylurea herbicides on soil fungi in corn- and soybean-cropped soil. 15093

Variety of soybean insects are active in several states. 15232

Determination of linuron and its known and/or suspected metabolites in crop materials. 15566

Effects of chlorophenoxy herbicides on soybeans. 15646

SPECTROMETRY
Selective residue determination of sulfur-, halogen-, and phosphorus-containing pesticides by helium-plasma emission spectrometry. 15656

SPECTROPHOTOFLUOROMETRY
The spectrophotofluorometric determination of buquinolate in poultry tissue and eggs. 15511

SPECTROPHOTOMETRY
Infrared identification of chlorinated insecticides in the tissues of poisoned fish. 15553

Analysis of Dursban in livestock dips and sprays. 15658

SPECTROSCOPY
Determination of DOT and related substances in human fat. 15569

SPERMATOGENESIS
The effects of exogenous testosterone on spermatogenesis of bulls. 15300

SPERMATOPHORES
Mating studies of the pink bollworm, Pectinophora gossypiella (Lepidoptera: Gelechiidae), based on presence of spermatophores. 14880

SPERMATOZOA
Sperm depletion in chemosterilized and normal males of the yellow fever mosquito, Aedes aegypti. 14972

SPHAEROTHECA PANNOSA
The orchard development of peach powdery mildew. 15216

SPHECIDAE
Hymenoptera from Turkey Sphecidae, i. 14805

SPIDERS
Spiders of the Arkansas cotton field. 14815

Life histories and habits of two species of Philodromus (Araneida: Thomisidae) in Ontario. 14936

SPINAL CORD
Post-tetanic potentiation in spinal cord of normal and myoclonic pigs. 15306

SPINDLE TUBER (POTATOES)
Serology of the potato spindle tuber virus. 15009

Symptomless hosts of the potato spindle tuber virus. 15146

SPINE
Post-tetanic potentiation in spinal cord of normal and myoclonic pigs. 15306

SPODOPTERA
Variety of soybean insects are active in several states. 15232

SPORULATION
Sporulation of Phytophthora phaseoli. 15086

SPRAYING
The influence of spray programs on the fauna of apple orchards in Nova Scotia. XII. Second supplement to VII. Effects on beneficial arthropods. 14912

Analysis of Dursban in livestock dips and sprays. 15658

Action and effectiveness of certain classes of herbicides. 15667

SPRAYING EQUIPMENT
A small self-propelled sprayer for agricultural research. 15683

SPRING BLACK STEM (ALFALFA)
Association of polygalacturonate trans-eliminase with southern anthracnose but not with spring black stem or Stemphylium leaf spot of alfalfa. 15624

SPRING DEAD SPOT (CYNODON DACTYLON)
Results of chemical drenches in the control of spring dead spot of bermuda grass. 15212

SQUASH
Plant-to-plant transfer of stone fruit ringspot virus in squash by pollination. 15035

Control of the pickleworm on cucurbits. 15228

STAINING
Methods for staining capsular virus inclusion bodies typical of granuloses of insects. 14894

Improved staining method for leucocyte count of poultry. 15444

Note on staining as an aid in counting vinegar eelworms in vinegar. 15534

STALK ROT (CORN)
Comparison pathogenicity studies of fungi associated with corn stalk rot. 15152

STANDARDIZATION
Standardization of Bacillus thuringiensis products. homology of standard. 15696

STAPHYLOCOCCUS AUREUS
The effect of the use of antibacterial drugs, particularly as food additives, on the emergence of drug-resistant strains of bacteria in animals. 15467

STARVATION
Some problems associated with weighing aphids that have fed after starving, as a method of measuring intake of plant sap. 14943

STATOLON
Virus-like particles of a fraction of a statolon, a mould product. 15617

STEM END RUSSET (APPLES)
Occurrence and amount of stem cavity russet on golden delicious apples. 15015

STEM ROT (PEAS)
Rhizoctonia tip blight and stem rot of pea. 15049

STEM RUST (WHEAT)
Effect of variations in temperature on the reaction of temperature-sensitive wheat varieties to wheat stem rust. 15019

STEMPHYLIUM
Stemphylium leaf spot of parsley. 15108

Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

Stemphylium ray speck of chrysanthemum. 15195

STEREOTROPISM
Experimental hypopituitarism in swine: a stereotaxic method of inducing the condition with beta irradiation. 15455

STERILITY
Dispersal and migration of tepa-sterilized Mexican fruit flies. 14842

Phenotypic restoration of fertility in a

male-sterile mutant by treatment with gibberellic acid. 15629

STERILIZATION
Sexnal sterilizatien of screw-worm flies by N,N'-tetramethylenebis(1-aziridinecarboxamide): influence of route of administration. 15501

Chemical structure and sterilizing activity of N,NO-alkylenehis-(1-aziridinecarboxamides) in screw-worm flies. 15605

STEROIDS
Steroid alkaloids in the disease resistance of white potato tubers. 14995

STEROLS
Sterol storage and reporduction in the house fly. 14922

STERRHINAE
Guide to the Geometridae of Canada (Lepidoptera). I. subfamily Sterrbinae. 14831

STICTOCEPHALA
A clarification of certain structures in the thoracic region of Oxyrhachis (Homoptera'Membracidae). 14821

STORAGE
Inflnence of pre-storage treatments on the mortality of the San Jose scale (Homoptera: Diaspididae) on apples held in storage. 15532

Mortality of the San Jose scale (Homoptera: Diaspididae) on stored apples of different varieties and harvest dates. 15533

STORAGE DISEASES
The effect of storage molds on germination and vigor of canning peas. 15025

Polyetbylene liners and fungicides for peacbes and nectarines. 15526

STORAGE INJURIES
Brnising as a predisposing factor in the decay of stored cranberries. 15064

Comparison of field corn varieties for resistance to corn earworm and stored grain insect injury in the Everglades. 15530

STRAWBERRIES
Patbogen variability and breeding Verticillium wilt resistant strawberries. 15018

Stndies on the isolation of the strawberry leaf scorch pathogen Diplccarpon earliana. 15173

STREAK (PEAS)
Mnltiplication and movement of Wisconsin pea streak virus in pea. 15118

STREPTOCOCCUS
Microorganisms from the mid-gut of the larva of Tenebrio obscurus Fabricius. 14924

STREPTOGAN
Antibiotic streptogan and process for preparation. patent 3,334,015. 15671

STREPTOMYCES IPOMOEA
Sweetpotato soil, rot development in Olivier silt loam soil as affected by annual applications of lime or sulfnr over a seven-year period. 15123

STREPTOMYCES STREPTOGANENSIS
Antibiotic streptogan and process for preparation. patent 3,334,015. 15671

STREPTOMYCIN
Treatment of diarrboea in dogs. 15380

STRESS
The influence of pbysical stress on growth and nnclear polyhedrosis of Trichoplusia ni (Huebner). 15242

STRIDULATION
Sound prodnction by the cereal leaf beetle. 14958

STRONGYLOSIS
Snrvey on the belminths of dromedary in Chad, with special referrence to gastro-intestinal strongylosis and haemonchosis (Haemonchus longistipes). 15514

STUNT (PEANUTS)
Peanut stunt disease survey in Virginia, 1966. 15124

SUCCINIC ACID, 2,2-DIMETHYLBYDRAZIDE
Effect of growth-regulating and otber compounds on bacterial spot of pepper. 15219

SUCROSE
Methods for studying aggregation and feeding bebavior of the confused flour beetle, Triholium confusum (Coleoptera' Tenebrionidae). 14910

In vitro increase in virus infectivity. iI. 15221

SUDAN
Record of two Longidorus species from Sudan. 15274

SUGAR
The amino acid and sugar compositions of healthy and anthracnose-infected watermelons. 15125

SUGAR BEETS
Effect of virus yellows on yield and guality of sugar beet seed. 15080

In vitro increase in virus infectivity. iI. 15221

Notice of filing of petition regarding pesticides. 15586

SUGARCANE
Storage and germination of cuttings and soil microorganisms as tbey relate to tbe pineapple disease of sugar cane. 15016

Effect of sugarcane borer infestation on the yield and grade of corn. 15233

SULFAMETHAZINE
Safety and tissue residue evaluations in swine fed rations containing cblortetracycline, sulfametbazine, and penicillin. 15411

Cellular response to endogenous stages of Coccidia in cattle, witb observations of tbe influence of chemicals upon tbe bost-parasite relationship. 15509

SULFITES
Cbaracterization of the plant damage prohlem hy air pollutants in New Jersey. 15538

SULFONAMIDES
Sensitivity spectrnm of Bacillus thuringiensis var. tburingiensis Berliner to antibiotics, sulfonamides, and other substances. 14895

SULFUR
Sweetpotato soil, rot development in Olivier silt loam soil as affected hy annual applications of lime or sulfur over a seven-year period. 15123

Sulfur-selenium-vitamin E interrelations in ovine nutrition. 15330

SULFUR DIOXIDE
Reduction of post-harvest decay in raspberries with S02. 15523

Effect of storage environment on quality of table grapes and on requirements of sulfur dioxide fumigation program. 15527

Characterization of the plant damage problem by air pollutants in New Jersey. 15538

SULFUR ISOTOPES
Uptake of radioactive ethyl NN-DI-N-PROPYLTHIOCARBAMATE (EPTC-35 S) and translocation of sulphur-35 in various crops. 14992

SURFACE-ACTIVE AGENTS
Biological activity of surfactants and some chemical intermediates against pre-imaginal mosquitoes. 14979

Effects of surfactants on fungi. 15647

SURVEYS

SURVEYS
A survey to determine the salmonella contamination rate in livestock and poultry feeds. 15535

SWAMPS
A new disease of swamp tupelo. 15271

SWEETPOTATOES
Effects of plant-bed applications of 2,6-dichloro-4-nitroaniline on control of sclerotial blight and on plant production in sweet potatoes. 15014

Peroxidase activity in virus-infected sweet potatoes. 15113

Sweetpotato soil, rot development in Olivier silt loam soil as affected by annual applications of lime or sulfur over a seven-year period. 15123

Elimination of root-knot nematodes from infested sweetpotato roots and plants. 15262

Protein and isozyme patterns of sweet potatoes as related to acquired immunity. 15650

SWINE
Post-tetanic potentiation in spinal cord of normal and myoclonic pigs. 15306

Studies on hemolytic Escherichia coli associated with edema disease of swine. I. Separation and properties of a toxin of hemolytic Escherichia coli. 15351

Swine serum and CO2 in the isolation of avian PPLO. 15364

High mortality in Florida swine herd infected with the encephalomyocarditis virus. an accompanying epizootiologic survey. 15369

Studies on the enteroviruses of the pig-IV.
the isolation in tissue culture of a possible enteric cytopathogenic swine orpban (ECHO) virus (V13) from the feces of a pig. 15399

Pigweed (Amaranthus retroflexus). an oxalate-containing plant. 15404

Safety and tissue residue evaluations in swine fed rations containing chlortetracycline, sulfamethazine, and penicillin. 15411

Synthesis and cytopathogenesis of African swine fever virus in porcine cell cultures. 15416

Experimental inactivated-virus hog cholera vaccines' induction period of immunity. 15435

Cytogenetic alterations in swine kidney cells persistently infected with hog cholera virus and propagated with and without antiserum in the medium. 15437

Experimental hypopituitarism in swine: a stereotaxic method of inducing the condition with beta irradiation. 15455

Toxocara lesions stimulate those of Ascaris suum. 15456

Site or localization and effects of swine nasal virus in experimental pigs. 15474

Factors producing embryonic and fetal abnormalities, death, and abortion in swine. excerpts from the Symposium on Factors Producing Embryonic and Fetal Abnormalities, Death, and Abortion in Swine, sponsored by the National Academy of Science, U.S. livestock Sanitary Association, and Agricultural research service, U.S. department of agriculture. october 2-3, 1967, Chicago, Illinois. 15485

Destruction of Salmonella during slaughtering of swine; importance of scalding. 15536

Correlation of the effects of parathion on erythrocyte cholinesterase with symptomatology in pigs. 15574

Food additives permitted in feed and drinking water of animals or for the treatment of food-producing animals. food additives permitted in food for human consumption. thiabendazole. 15596

Acute lead poisoning in swine. 15604

SYMPOSIA
Factors producing embryonic and fetal abnormalities, death, and abortion in swine. excerpts from the Symposium on Factors Producing Embryonic and Fetal Abnormalities, Death, and Abortion in Swine, sponsored by the National Academy of Science, U.S. livestock Sanitary Association, and Agricultural research service, U.S. department of agriculture. october 2-3, 1967, Chicago, Illinois. 15485

SYNERGISM
Coexistence of infectious bronchitis and infectious laryngotracheitis. 15451

SYNOVITIS
Aureomycin chlortetracycline as a preventive for experimental synovitis in chickens. 15466

SYRPHUS
Biology of the black cherry aphid in the Willamette Valley, oregon. 15238

SYSTEMIC INSECTICIDES
Distribution of bidrin in the foliage of treated trees. 15230

Persistence of two systemic carbamate insecticides in three types of soils. 15541

Late-season control of European elm scale with bidrin trunk injections. 15612

T, 2,4,5-
Microcoulometric gas chromatography analysis of selected herbicides in water. 15540

TACHINIDAE
Some difficult to distinguish species of the genus Hyperecteina Schiner (Diptera, Larvaevoridae). 14808

TAENIA HYDATIGENA
Chemical ovicidal measures as applied to Taenia hydatigena, Taenia ovis, Taenia pisiformis, and Echinococcus granulosus. 15516

TAENIA OVIS
Chemical ovicidal measures as applied to Taenia hydatigena, Taenia ovis, Taenia pisiformis, and Echinococcus granulosus. 15516

TAENIA PISIFORMIS
Chemical ovicidal measures as applied to Taenia hydatigena, Taenia ovis, Taenia pisiformis, and Echinococcus granulosus. 15516

TDE
Metabolism of dDT and some other chlorinated organic compounds by Aerobacter aerogenes. 15571

Acetonitrile dilution: a possible source of error in the "rapid method for chlorinated pesticide residues in nonfatty foods". 15577

Effects of isomers of DDD on thyroid and adrenal function in rats. 15607

DDT and related compounds in dog food and CSMA media used in insect rearing. 15611

TEA
Food additives permitted in food for human consumption. 1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethanol. 15594

Food additives permitted in food for human consumption. Ethion. 15595

TECTONA GRANDIS
Field observations on root rot of teak in Tanzania. 15081

TEMPERATURE
Exposure of house flies and oriental rat fleas on a high-altitude balloon flight. 14962

Effect of variations in temperature on the reaction of temperature-sensitive wheat varieties to wheat stem rust. 15019

Effects of light, temperature, and fertilizer on infection of wheat leaves by Septoria tritici. 15047

Effect of incubation temperature on length and infectivity

of potato virus X particles in four host species. 15068

Severity and distribution of cotton boll rot as related to temperature. 15070

The biology and ecology of Dendroctonus valens Lec., and the biology, ecology, and control of Dendroctonus frontalis (Mexicans) Zimm in central Mexico (Coleoptera: Scolytidae). 15165

Temperature conversion of rust response of bean. 15167

TENEBRIO
Energy sources during embryogenesis of the yellow mealworm, Tenebrio molitor. 14938

TENEBRIO OBSCURUS
Microorganisms from the mid-gut of the larva of Tenebrio obscurus Fabricius. 14924

TENEBRIONIDAE
Nutritional pest control: The 'self-protection' of foodstuffs against Tribolium confusum (Coleoptera: Tenebrionidae) often presumably through nutritional factors. 14824

Quinoid secretions in grain and flour beetles. 15531

TEPA
Dispersal and migration of tepa-sterilized Mexican fruit flies. 14842

TETANUS
Post-tetanic potentiation in spinal cord of normal and myoclonic pigs. 15306

TETRACYCLINE
The effect of the use of antibacterial drugs, particularly as food additives, on the emergence of drug-resistant strains of bacteria in animals. 15467

TETRADECADIENOIC ACID, TRANS-3,CIS-5-
Sex attractant of the black carpet beetle. 14954

TETRADIFON
Three plans for using acaricides to control mites on apple. 15223

TETRANYCHIDAE
Fine structure of the integument of the two-spotted spider mite, Tetranychus telarius (Acarina:Tetranychidae). 14849

TETRANYCHUS
An evaluation of the rate of reproduction of the two-spotted spider mite reared on gibberellin-treated bean plants. 14876

TETRASTICHUS PYRILLAE
Viability of the chalcid parasite Tetrastichus pyrillae Crawford from the host Pyrilla perpusilla Walker egg. 14829

TETTIGONIIDAE
Tegminal amplifiers and spectrum consistencies in Conocephalus nigropleurum (Bruner), Tettigoniidae. 14925

TEXAS
Observations on cotton root-knot nematode in grain sorghum in west Texas. 15266

THERAPEOTICS
Avian infectious hepatitis III. Treatment of chickens in egg production. 15462

THERIOAPHIS
Rearing of three spotted alfalfa aphid Hymenopterus parasites for mass release. 14878

Spotted alfalfa aphid spreads. 15236

THERMOSTATS
A constant temperature bath for pot-grown plants. 15688

THIABENDAZOLE
Food additives permitted in feed and drinking water of animals or for the treatment of food-producing animals. food additives permitted in food for human consumption. thiabendazole. 15596

THIAZOLYLBENZIMIDAZOLES, 2-
Fungal compositions and methods for their use. patent 3,370,957. 15675

THIELAVIOPSIS BASICOLA
New medium for the isolation of Thielaviopsis basicola on dilution plates from soil and rhizosphere. 15150

THINNING (TREES)
Bark beetle mortality in precommercial herbicide thinnings of western hemlock. 15245

THIRAM
Action of soil fungicides. IV. changes in the spectrum of soil fungi. V. sensitivity of soil organism in vitro. 15041

THOMISIDAE
Life histories and habits of two species of Philodromus (Araneida: Thomisidae) in Ontario. 14936

THORAX
A clarification of certain structures in the thoracic region of Oxyrhachis (Homoptera'Membracidae). 14821

THURICIDE
Dust containing Bacillus thuringiensis for control of chicken body, shaft, and wing lice. 15504

Standardization of Bacillus thuringiensis products. homology of standard. 15696

THYMIDINE
Effect of interferon on early enzyme and viral DNA synthesis in vaccinia virus infection. 15401

THYROID GLAND
The measurement of bovine thyroid activity using low dosages of radioactive iodine I131. 15297

TIMBER
Timber pests and diseases. 1st ed. TA422. P5. 15529

TIP BLIGHT (PEAS)
Rhizoctonia tip blight and stem rot of pea. 15049

TISSUE CULTURE
Tissue culture propagation and pathology of a CELO virus. 15339

Cytologic changes induced by infectious canine hepatitis virus in tissue culture. 15443

Electron microscopy of infectious canine hepatitis virus grown in cultures of canine kidney cells. 15475

The cultivation and modification of the avian infectious synovitis agent in tissue culture. 15493

TISSUES
Evidence for functional cytochrome oxidase in tissues infected by obligate parasites. 15033

Lesion maturation, fungal development, and distribution of endopolygalacturonase and cellulase in Rhizoctonia infected bean hypocotyl tissues. 15207

Safety and tissue residue evaluations in swine fed rations containing chlortetracycline, sulfamethazine, and penicillin. 15411

Note on identification of azinphosmethyl in human tissues. and in figs. 15579

TOBACCO
Control of tobacco fleck by dusting with Zineb. 15003

The interaction of potato viruses X and Y in inoculated tobacco leaves at various temperatures. 15051

Heat-induced susceptibility of tobacco to Tropaeolum mosaic virus. 15110

The influence of reducing substances on resistance to bacterial wilt of tobacco. 15119

Uridine-H3 incorporation in tobacco infected by tobacco mosaic virus. 15190

Tobacco fleck controlled with antiozonants. 15196

TOCOPHEROLS

TOCOPHEROLS
Pharmacology and toxicology of carbon tetrachloride in the sheep. iV. reduction and augmentation of toxicity to sheep. 15397

TOMATOES
The effect of growth substances on Verticillium wilt of. 15181

Transmission of tobacco mosaic virus in tomato seed. 15198

Residue studies of tomato foliage and fruits from plants receiving PEBC- "14 pre-or post-emergence. 15560

Inhibition of plant growth by halogenated benzoic acids. 15628

Effect of certain fungi on the growth of dwarf tomatoes in gnotobiotic conditions. 15634

A constant temperature bath for pot-grown plants. 15688

TONSILS
The isolation of viruses from the cecal tonsils of chickens and turkeys. 15405

TOXAPHENE
Field tests with insecticides for control of lone star ticks on cattle. 15502

Pesticides' unsung assistants. 15663

TOXICITY
Biological activity of surfactants and some chemical intermediates against pre-imaginal mosquitoes. 14979

Factors in the production and stimulation of some antibiotics of fungal origin inhibiting the growth of pathogenic fungi. 15140

Experimental photosensitization by spring parsley (Cymopterus watsonii) in chicks. 15494

The toxicity of aminotriazole to domestic animals. 15608

Toxicologic effects of a phosphorothioic acid insecticide in sheep. 15609

Toxicologic effects of a phosphorothioic acid insecticide in cattle. 15610

TOXICOLOGY
La lutte chimique contre les insects nuisibles. (chemical control of insect pests). ed. 3. sB951.15. 14906

Simple screening test for systemic aphicides. 14921

Viscosity of naphthenic and paraffinic spray oils in relation to phytotoxicity and Sigatoka disease control on banana leaves. 15023

Pharmacology and toxicology of carbon tetrachloride in the sheep. iV. reduction and augmentation of toxicity to sheep. 15397

Toxicity of topically applied fats and oils. 15520

Variations in toxicity to bluegill sunfish of phenoxy herbicides. 15542

Correlation of the effects of parathion on erythrocyte cholinesterase with symptomatology in pigs. 15574

Chemical structure and sterilizing activity of N,NO-alkylenebis-(1-aziridinecarboxamides) in screw-worm flies. 15605

Action and effectiveness of certain classes of herbicides. 15667

TOXINS
Studies on hemolytic Escherichia coli associated with edema disease of swine. I. Separation and properties of a toxin of hemolytic Escherichia coli. 15351

Exterotoxemia of sheep. I. Effects of Clostridium perfringens type D toxin on the brains of sheep and mice. 15377

Enterotoxemia of sheep. III. Clostridium perfringens type D antitoxin titers of normal, nonvaccinated lambs. 15378

Viruses, serums, toxins, and analagous products. notice of extension of time to submit written data, views, or arguments. 15481

TOXOCARA
Toxocara lesions stimulate those of Ascaris suum. 15456

TRACTORS
Shift to chemical weed control hastens change from mules to tractors. 15278

TRAPS
The possible use of pine needles as spore traps. 15077

TREE DISEASES
Longevity of the fire blight organism, Erwinia amylovora on pear trees in the greenhouse as demonstrated by infection after sandblast injury. 14901

Principal diseases affecting Pinus radiata in Chile. 15008

Antibiotic treatment of young loblolly pines infected with fusiform rust. 15050

Field observations on root rot of teak in Tanzania. 15081

Albino Peridermium harknessii in ponderosa pine. 15153

Oligomycin treatments of oak wilt in northern pin oaks. 15154

Appraisal of biological control of Arceuthobium campylopodum F. campylopodum by Colletotrichum gloeosporioides. 15283

TREE INJURIES
Salt injury to trees. 15626

TREE PATHOLOGY
Host-parasite relationships of garden balsam and some nematodes. 15265

TREES
Distribution of bidrin in the foliage of treated trees. 15230

TRIALEURODES
The coexistence of insect parasites and hosts in laboratory ecosystems. 14801

TRIBOLIUM
Fumigant toxicity of 1,2,3-tribromopropene, ethyleneimine, crotyl bromide and carbon tetrachloride to stored-product insects. 14888

Methods for studying aggregation and feeding behavior of the confused flour beetle, Tribolium confusum (Coleoptera' Tenebrionidae). 14910

TRIBROMOPROPENE, 1,2,3-
Fumigant toxicity of 1,2,3-tribromopropene, ethyleneimine, crotyl bromide and carbon tetrachloride to stored-product insects. 14888

TRICHIOCAMPUS IRREGULARIS
Adaption of a nuclear-polyhedrosis virus of Trichiocampus viminalis (Fallen) to larvae of Trichiocampus irregnlatis (Dyar). 14956

TRICHLORFON
A photoperiodic effect on the daily susceptibility of the house fly to trichlorfon. 14877

Field tests with insecticides for control of lone star ticks on cattle. 15502

TRICHLORO-2-PYRIDINOL, 3,5,6-
Investigations on Dursban insecticide. metabolism of O,O-diethyl O-3,5,6-trichloro-2-pyridyl phosphorothioate and 3,5,6-trichloro-2-pyridinol in plants. 15582

TRICHLOROACETATE
Biological decomposition of herbicides in soil. i. mono-and trichloroacetate and dichloropropionate. 15543

TRICHLOROBENZOIC ACID, 2,3,6-
Action and effectiveness of certain classes of herbicides. 15667

TRICHLOROPHENYLACETIC ACID, 2,3,6-, GLYCOL ESTERS
Herbicidal method utilizing glycol esters of 2,3,6-trichlorophenylacetic acid as herbicides. patent 3,325,273. 15670

TRICHODERMA
The effect of corn root exudate on the growth of five fungi associated with corn roots. 15132

TRICHOPLUSIA
Sex pheromones of noctuid moths. VIII. Orientation to light by pheromone-stimulated males of Trichoplusia ni (Lepidoptera: Noctuidae). 14881

Larval feeding behavior of the cabbage looper, Trichoplusia ni. 14886

Seasonal shifts in the relative resistance to insect attack of eight commercial cabbage varieties. 15285

TRICHOSTRONGYLUS AXEI
Survival of infective larvae of the cattle nematodes, Cooperia punctata, Trichostrongylus axei, and Oesophagostomum radiatum. 15519

TRIIODO BENZOIC ACID, 2,3,5-
Inhibition of plant growth by halogenated benzoic acids. 15628

TRISTEZA (CITRUS)
Tristeza virus in Arizona citrus. 14996

Failure of psorosis virus to protect against citrus variegation virus. 15028

TRYPORYZA INCERTULAS
Descriptions of larval and pupal stages of four lepidopterous rice borers in Malaysian Borneo (Sarawak). 14945

TSUGA
Bark beetle mortality in precommercial herbicide thinnings of western hemlock. 15245

TURKEY EGGS
Egg transmission of infectious sinusitis in naturally infected turkeys. 15394

TURKEYS
Effect of diet on aortic ruptures in turkeys induced by diethylstilbestrol. 15304

Treatment of experimental infectious sinusitis of turkeys with erythromycin. 15322

The histopathologic characteristics of diseases producing inflamation of the air sacs in turkeys-a comparative study. 15324

The isolation and propagation of a naturally occurring turkey lymphoid tumor by cellular transplants. 15325

Studies on pasteurellosis. III. Control of experimental fowl cholera in chickens and turkeys with an emulsified killed vaccine. 15382

Egg transmission of infectious sinusitis in naturally infected turkeys. 15394

An unusual aspect of Pasteurella pseudotuberculosis in turkeys. 15395

The isolation of viruses from the cecal tonsils of chickens and turkeys. 15405

Virus hepatitis in turkeys. 15412

Factors affecting the production and detection of ornithosis antibodies in infected turkeys. 15425

TUTOVYI-3
Pigment-producing variants of Bacillus thuringiensis Berliner from the silkworm. 14953

ULCERATIVE ENTERITIS
Further studies on the causative organism of ulcerative enteritis. 15429

ULMUS
Effect of Dutch elm disease on seedling elms. 15004

Seasonal fluctuations in susceptibility of young elm seedlings to Dutch elm disease. 15187

ULTRAVIOLET RAYS
Analysis of Dursban in livestock dips and sprays. 15658

UNITED STATES
Pathogenicity of isolates of the bean wilt Fusarium from England and the United States. 15006

Index to genera of pathogens listed in the "Index of Plant Diseases in the United States. 1. 15073

Spotted alfalfa aphid spreads. 15236

UREA
Effect of urea on the formation of parasporal inclusions in species and varieties of Bacillus cereus group. 14957

Colonization of shortleaf pine stumps. 14990

UREDINALES
Respiratory changes during development of rust diseases. 15034

UREDOSPORES
Technique for germinating uredospores of Puccinia striiformis. 15681

URINE
DDT in humans and animals; determination of DDA in urine using an ion exchange resin. 15555

A sensitive procedure for urinary p-nitrophenol determination as a measure of exposure to parathion. 15559

UTERUS
Variations in uterine response to experimental infection due to the hormonal state of the ovaries. II. The mobilization of leukocytes and their importance in uterine bactericidal activity. 15288

V-C13 NEMACIDE
Chemicals for plant disease control. 15128

VACCINES
Potency testing of low egg passage modified live-virus rabies vaccines. 15293

A preliminary note on the use of an inactivated vaccine against equine pest. 15329

Contribution to the study of ovine listeriosis and immunoprophylaxis against the disease in France. 15414

Antibody response to a combined living attenuated distemper - hepatitis vaccine. 15434

Experimental inactivated-virus hog cholera vaccines' induction period of immunity. 15435

Immunisation of sheep with multi-component clostridial vaccines. 15469

VACCINIA VIRUS
Effect of interferon on early enzyme and viral DNA synthesis in vaccinia virus infection. 15401

VAPAM
Action of soil fungicides. IV. changes in the spectrum of soil fungi. V. sensitivity of soil organism in vitro. 15041

VAPORS
Factors affecting the vapor loss of EPTC from soils. 15662

A vapor trapping apparatus for determining the loss of EPTC and other herbicides from soils. 15684

VEGETABLES
Uptake of radioactive ethyl NN-DI-N-PROPYLTHIOCARBAMATE (EPTC-35 S) and translocation of sulphur-35 in various crops. 14992

Notice of filing of petition regarding pesticides. 15587

VENT VACCINATION

VENT VACCINATION
Revaccination of chickens against Newcastle disease by vent, wing-web, and intramuscular routes. 15495

VENTILATION
A ventilation unit for aerating insectary sleeve cages. 15690

VENTURIA INAEQUALIS
Metabolism in vitro of phloridzin and other compounds by Venturia inaequalis. 15627

VERTEBRAE
Vertebral biopsy in cattle. 15445

VERTICILLIUM
Control of Verticillium wilt of peppermint by soil fumigation in muck soil. 15065

Fungi isolated from black stem of alfalfa and the influence of temperature on lesion formation and disease severity. 15160

VERTICILLIUM ALBO-ATRUM
The effect of growth substances on Verticillium wilt of. 15181

Mechanisms of variations in Verticillium albo-atrum. 15618

Rates of phenolic synthesis in potato roots resistant and susceptible to Veritcillum albo-atrum.
patil, s s. 15654

VERTICILLIUM WILT
Pathogen variability and breeding Verticillium wilt resistant strawberries. 15018

VIBRIO FETUS BACTERINS
An in vitro study of extracted antigens of Vibrio fetus isolates. 15454

VIBRIOSIS
Placental pathology of sheep with vibiosis. 15392

VICTORIN
Permeability changes caused by victorin. 15651

VINEGAR
Note on staining as an aid in counting vinegar eelworms in vinegar. 15534

VIRAL VACCINES
Newcastle disease immunity in broilers and caponettes vaccinated with killed-virus and live-virus vaccines. 15349

Virus diseases in calves. 15426

Revaccination of chickens against Newcastle disease by vent, wing-web, and intramuscular routes. 15495

VIROLOGY
Heat activation of virus inoculum. 15059

Purification, serology, and properties of a new cowpea virus. 15103

The in vivo and in vitro isolation of avian encephalomyelitis virus (AEV). 15388

The development of a chicken embryo lethal strain of avian encephalomyelitis virus. 15413

A quick method for the diagnosis of avian pox and infectious laryngotracheitis. 15463

Tissue culture and chicken embryo techniques for infectious laryngotracheitis virus studies. 15680

VIRUS DISEASES (ANIMALS)
The isolation of infectious bovine rhinotrachetis virus from cattle affected with conjunctivitis-observations on the experimental infection. 15313

Tissue culture propagation and pathology of a CELO virus. 15339

The development of a chicken embryo lethal strain of avian encephalomyelitis virus. 15413

Virus diseases in calves. 15426

The glycerolipids of Mycoplasma mycoides. 15439

Buoyant density of African horsesickness virns. 15458

Site of localization and effects of swine nasal virus in experimental pigs. 15474

Revaccination of chickens against Newcastle disease by vent, wing-web, and intramuscular routes. 15495

VIRUS DISEASES (INSECTS)
Transmission of some insect viruses with particular reference to ovarial transmission and its importance in the development of epizootics. 14862

Biotic potential of phytoseiid mites fed on virus-infected citrus red mites. 14950

The epizootiology of virus diseases in field populations of the armyworm, Pseudaletia unipuncta (Haworth). 14964

VIRUS DISEASES (PLANTS)
The ribonucleic acids of leaves and pods of peas infected with pea enation mosaic virus. 15017

Maintaining virus-free cultivars of peach in Michigan. 15026

Beet yellow stunt virns. 15043

Antihost serum improves plant virus purification. 15062

Resistance to several viral diseases inherited as a unit. 15083

Radish mosaic viruses. 15084

Purification, serology, and properties of a new cowpea virus. 15103

Peanut stunt disease survey in Virginia, 1966. 15124

Transmission of apple mosaic and stem-pitting viruses through root grafts. 15126

Cross-transmission studies with citrus and prunns virnses. 15155

Typical field symptoms of pea viroses produced in greenhouse by deferring inoculation until flowering time or later. 15157

Preliminary note on transmission of a virus disease resembling tungro of rice in India and other virus-like symptoms. 15159

A difference in the translocability of two virnses in bean plants. 15170

Repellancy of reflective aluminum to transient aphid viral vectors. 15189

In vitro increase in virus infectivity. II. 15221

Detection of common antigens of apple virus isolates by complement fixation. 15635

VIRUS HEPATITIS
Virus hepatitis in turkeys. 15412

A modified microgel diffusion method and its application in the study of the virus of duck hepatitis. 15417

VIRUS X (POTATOES)
Effect of incubation temperature on length and infectivity of potato virus X particles in four host species. 15068

VIRUS Y (POTATOES)
Transmission of virus Y by instars of Myzus persicae (Homoptera: Aphidae). 14949

VIRUSES
Fecundity, longevity, and transinfectivity of citrus red mites (Panonychus citri) infected with a noninclusion virus. 14883

Methods for staining capsular virus inclusion bodies typical of granuloses of insects. 14894

Purification of viruses from pea roots. 15052

Purification, serology, and properties of a new cowpea virus. 15103

Potency testing of low egg passage modified live-virus rabies vaccines. 15293

Avian enteric cytopathogenic viruses. I. Isolation. 15332

Avian enteric cytopathogenic viruses. II. Characteristics of a prototype. 15333

Response of birds to one intranasal vaccination with B-1 strain of Newcastle disease virus. 15449

Viruses, serums, toxins, and analagous products. notice of extension of time to submit written data, views, or arguments. 15481

Virus-like particles of a fraction of a statolon, a mould product. 15617

VISCOSITY
Viscosity of naphthenic and paraffinic spray oils in relation to phytotoxicity and Sigatoka disease control on banana leaves. 15023

VITAMIN A
Effects of vitamin-A deficiency and high-level chlortetracycline on experimental candidiasis of turkeys. 15479

VITAMIN B COMPLEX
Persistent diarrhoea and vitamin B in the horse. 15418

VITAMIN E
Sulfur-selenium-vitamin E interrelations in ovine nutrition. 15330

VOLATILE SUBSTANCES
A bioassay for volatile toxicants from fungicides in soil. 15162

WASHINGTON
A new fungus leaf spot disease of cucumber in western Washington. 15057

The role of seed transmission in the epidemiology of bean mosaics in central Washington. 15163

WATER
Source reduction through water management. 14985

Experimental water intoxication in calves. 15396

Acetonitrile dilution: a possible source of error in the "rapid method for chlorinated pesticide residues in nonfatty foods". 15577

Food additives permitted in feed and drinking water of animals or for the treatment of food-producing animals. food additives permitted in food for human consumption. thiabendazole. 15596

WATER INTOXICATION
Experimental water intoxication in calves. 15396

WATER POLLUTION
Effect of naturally occurring highly mineralized water on the growth of laboratory animals. 15305

Microcoulometric gas chromatography analysis of selected herbicides in water. 15540

Analytical procedures. in Methology. 15546

Insecticide analysis procedures used by the Klamath Basin study. (Paper presented at Pacific North West Pollution Control Association, Vancouver, B.C.). 15547

Water pollution control and abatement. tD420.w45. 15548

Infrared identification of chlorinated insecticides in the tissues of poisoned fish. 15553

Semi-automatic extraction of organic materials from water. public Health Service Water Pollution Surveillance System Applications and Development Report 16. 15665

WATERMELONS
The amino acid and sugar compositions of healthy and anthracnose-infected watermelons. 15125

WEATHER
Seasonal shifts in the relative resistance to insect attack of eight commercial cabbage varieties. 15285

WEED CONTROL
Control of plant-nematodes and weeds in holly nurseries. 15257

An obstacle course in ragweed control. 15281

WEEDS
Further additions to the list of fungus pathogens recorded in Chile. 15145

Experimental photosensitization by spring parsley (Cymopterus watsonii) in chicks. 15494

Control of pathogenic fungi, nematodes, and weeds by preplanting chemical treatments. 15640

WESTERN EQUINE ENCEPHALOMYELITIS VIRUS
Relationships between eastern and western equine encephalomyelitis viruses as demonstrated by the hemagglutination-inhibition antibody response of experimentally infeced chickens. 15419

WHEAT
Effect of variations in temperature on the reaction of temperature-sensitive wheat varieties to wheat stem rust. 15019

Some environmental factors influencing penetration from appressoria of Puccinia graminis f. sp. tritici on seedling wheat leaves. 15020

Seedling disease of wheat caused by Sclerotium rolfsii. 15098

Effect of moisture content and length of storage period upon germination percentage of seeds of corn, wheat, and barley free of storage fungi. 15524

Induced polygenic mutations in hexaploid wheats. 15621

WHITE CLOVER
Methods of mechanical transmission of bean yellow mosaic virus into white clover. 15002

WILDLIFE
La lutte chimique contre les insects nuisibles. (chemical control of insect pests). ed. 3. SB951.15. 14906

Safety of wildlife is important to planners of gnat-control program. 15239

Isolation of Listeria monocytogenes from brains of rabies-negative animals. 15438

Fish, wildlife unaffected by boll weevil program. 15557

DDT reportedly discovered in antarctic seals and fish. 15563

WILDLIFE FOOD PLANTS
Determination of Zectran residues in aerial forest spraying. 15576

WILT (QUERCUS)
Oligomycin treatments of oak wilt in northern pin oaks. 15154

WILT (TOMATOES)
The effect of growth substances on Verticillium wilt of. 15181

WING-WEB VACCINATION
Revaccination of chickens against Newcastle disease by vent, wing-web, and intramuscular routes. 15495

WINTER SQUASH
A dry rot of acorn squash, Cucurbita pepo. L. 15040

WISCONSIN
A note on Hoplitis producta (Cress.) in Wisconsin (Hymenoptera: Megachilidae). 14833

Feeding behavior and host preferences of some black flies (Diptera: Simuliidae) in Wisconsin. 14851

WOHLFAHRTIA

WOHLFAHRTIA
Rearing and biology of Wohlfahrtia vigil (Diptera: Sarcophagidae). 14875

WOOD
Estimation of marine-borer attack on wooden surfaces. 15252

WOOD DESTROYING FUNGI
Effect of light on the rate of decay of three wood destroying fungi. 15044

Fungi associated with a wood wasp in dying pines in Tasmania. 15205

Timber pests and diseases. 1st ed. TA422. F5. 15529

Color formation on phenol-containing media as related to lignin breakdown by wood-rotting basidiomycetes. 15630

WOOD STAINING FUNGI
Timber pests and diseases. 1st ed. TA422. F5. 15529

X-RAYS
Effect on adult emergence of whole and partial X-irradiation of pupae of the housefly, Musca domestica nebulo. 14926

Effects of x-irradiation of seed on x-1 and x-2 generations in Pinus banksiana Lambert. 15643

XANTHOMONAS MALVACEARUM
Longevity of Xanthomonas malvacearum in dried cotton plants and its signicance in dissemination of the pathogen on seed. 15202

XENOGLOSA
Squash and gourd bees of the genus Xenoglosa _Hymenoptera, Apoidea). 14827

XIPHINEMA AMERICANUM
Soil fumigation by injection and irrigation for the control of nematodes on hops. 15261

YELLOW DWARF (BARLEY)
Vector specificity of three strains of barley yellow dwarf virus. 15164

YELLOW MOSAIC (BEANS)
Methods of mechanical transmission of bean yellow mosaic virus into white clover. 15002

Bean yellow mosaic virus in detached leaves of red clover plants. 15038

YELLOWS (SUGAR BEETS)
Effect of virus yellows on yield and quality of sugar beet seed. 15080

YOLK SAC
Some factors affecting Rous sarcoma virus activity in the embryonated egg inoculated by the yolk - sac route. 15420

ZINC CHROMATE
Control of bacterial spot of peach. 15030

ZINEB
Control of tobacco fleck by dusting with Zineb. 15003

Organic fungicides for control of pecan scab. 15013

ZOOGEOGRAPHY
Danish Myrmeleontidae and their distribution. 14841

The ixodid ticks of Tanzania. a study of the zoogeography of the Ixodidae of an east African country. qL458.a2Y2. 14848

ZOONOSES
Salmonella and Shigella infections in bats in selected areas of Colombia. 15316

ZYTRON
Method for residues of Zytron, O-2,4-dichlorophenyl O-methyl isopropylphosphoramidothioate, in chicken tissues and eggs. 15565

2-(2,4,5-TRICHLOROPHENOXY) PROPIONIC ACID
Microcoulometric gas chromatography analysis of selected herbicides in water. 15540

Ackland, D M
Oxford University Museum
Hope Department of Entomology 14R00
Allen, R C
Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Me. 152R7
Amaro de Segneira, O
University of London 15001
Armstrong, G M
National Science Foundation 15006
Ayala, F J
Providence College
Department of Biology 14803
Azab, A K
Cairo University
Faculty of Agriculture
Plant Protection Department 14854
Bennet-Clark, R C
University of Edinburgh
Department of Zoology 14859
Borgatti, A L
Salem State College
Dept. Of Entomology 14R64
Brennan, E
New Jersey Agricultural Experiment Station, New Brunswick 15538
Broome, A W
Wisconsin Alumni Research Foundation 15288
Brown, J F
Wheat Industry Research Council Of Australia 15020
Burke, C N
National Institutes Of Health 15332
Burke, C N
National Institutes Of Health 15333
Calnek, B W
DeKalb Agricultural Association, Inc., DeKalb, Ill. 15335
Calnek, B W
DeKalb Agricultural Association, Inc., DeKalb, Ill. 15336
Chomiak, T W
U. S. Dept. Of Agriculture
Agricultural Research Service
Animal Disease And Parasite Research Division 15339
Chomiak, T W
U. S. Dept. Of Agriculture
Agricultural Research Service
Animal Disease And Parasite Research Division 15680
Christensen, C M
Cargill, Inc., Minneapolis, Minn. 15524
Clondsley-Thompson, J L
University of Khartoum, OAR 14R09
Collyer, E
Department of Scientific and Industrial Research
Entomology Division, Nelson, New Zealand 14810
Corbett, M K
University Of Maryland, College Park
Botany Dept. 15028
Cox, P L
Norwich Pharmical Company
Research and Development Dept.
Chemistry Division
Biochemistry Section 15511
Dale, W E
U.S. Public Health Service, Atlanta
Communicable Disease Center 15556
Daly, J M
National Institutes Of Health (Grant E-2000) 15033
Domermuth, C H
U. S. Dept. Of Agriculture
Agricultural Research Service
Animal Disease And Parasite Research Division 15353
Elliott, J W
U.S. Public Health Service, Wenatchee, Washington
Communicable Disease Center
Bureau of State Services 15559
Ellis, L F
Lilly Research Laboratories 15617
Epling, G P
Colorado State University, Fort Collins, Colo.
College of Veterinary Medicine
Dept. of Anatomy 15361
Fabricant, J
U. S. Dept. Of Agriculture
Agricultural Research Service
Animal Disease And Parasite Research Division 15362
Fabricant, J
U. S. Dept. Of Agriculture
Agricultural Research Service
Animal Disease And Parasite Research Division 15363
Fabricant, J
U. S. Dept. Of Agriculture
Agricultural Research Service
Animal Disease And Parasite Research Division 15364
Fabricant, J
U. S. Dept. Of Agriculture
Agricultural Research Service
Animal Disease And Parasite Research Division
Respiratory Diseases Project, Ne-5 15365
Fitzgerald, P R
University of Illinois
College of Veterinary Medicine
Department of Pathology and Hygiene 15366
Flentje, N T
Wisconsin Canners Association 15049
Fordyce Jr, C
Virginia Polytechnic Institute, Blacksburg
Dept. Of Plant Pathology And Physiology 15618
Frazier, M N
Eli Lilly And Co. 15512
Fregly, M J
University of Florida, Gainesville
College of Medicine
Department of Physiology 15607
Gessel, S P
University of Washington, Seattle
College of Forestry 15539
Glantz, P J
U. S. Public Health Service
National Istitute Of Allery And Infectious Diseases. 15373
Goerlitz, D F
U.S. Department of the Interior, Menlo Park, California
Geological Survey
Water Resource Division 15540
Gordon, M
Oniversity Of Cambridge, England
Sub-Dept. Of Veterinary Anatomy 15294
Gotbilf, S
University Of Florida
Dept. Of Entomology 14886
Gond, Jv
Indian Agricultural Research Institute, New Delhi, India
Botany Division 15621
Gratzek, J B
Iowa State University
Department of Statistics 15374
Greene, G L
Tela Railroad Co., La Lima, Honduras
Vining C. Dunlap Laboratories 15066
Hampton, R E
U. S. Public Health Service
National Institute Of Allergy And Infectious Diseases 15072
Heishman, J O
Regional Project NE-5 15383
Benson, J B
U.S. Dept. of Agriculture, Pullman, Washington
Dept. of Veterinary Pathology 153R5
Boerlein, A B
Colorado State University, Fort Collins
College Of Veterinary Medicine 15387
Boff, J K
Rohm And Haas Co., Philadelphia, Pa.
Agricultural And Sanitary Chemicals Dept. 15082
Borton, J C
Iowa State University, Ames
Dept. Of Botany And Plant Pathology 15084
Jeoffery, S M S
State Of Washington 15393
Jerstad, A C
Western Cooperative Hatcheries, Bellevue, Wash. 15394
Kaiser, M N
Emory University 14R28
Kilpatrick, R A
U.S. Department of Agriculture, College Station, Texas
Agricultural Research Service
Crops Research Division 15098
Koenig, R
Dentsch. Akad. Der Wissenschaften, Jena, German Dem. Rep.
Institut Fur Mikrobiologie Und Experimentelle Therapie 15101
Kurtzman Jr, R H
University Of Minnesota
Dept. Of Biology 15632
Ladisch, R K
Johns Hopkins University
Immaculata College
Department of Chemistry 15531
Langlois, R E
Purdue University
Department of Animal Science 15568
Lewis, L F
U. S. Dept. Of Agriculture, Corvallis, Oregon
Agricultural Research Service
Entomology Research Division 14971

Luke, H R

Luke, H H
University Of Florida
Plant Pathology Dept.
Agricultural Experiment Stations, Gainesville, Fla. 15114
Maggenti, A E
University of California, Davis
Department of Nematology 15261
Malca, I
University Of California, Riverside
Dept. Of Plant Pathology 15120
Marshall, V L
Iowa State University
College of Veterinary Medicine
Veterinary Diagnosis Laboratory
Toxicology Section 154D4
Matthews, T R
University of Wyoming, Laramie, Wyoming
Ivision of Veterinary Science 154D6
Mattson, A M
U.S. Public Health Service, Savannah
Communicable Disease Center 15569
McDaniel, L S
Fort Halifax Packing Co., Winslow, Me. 15678
McGuffin, W C
Canada Department of Forestry and Rural Development, Ottaw 14831
Meleney, W P
U. S. Department of Agriculture
Animal Disease and Parasite Research Division
Agricultural Research Service 15407
Mendlowski, B
U. S. Public Health Service
National Institutes Of Health 1540B
Mendlowski, H
D. S. Public Health Service
National Institutes Of Health 15409
Mercer, H D
Food and Drug Administration
Bureau of Veterinary Medicine 15410
Messersmith, R E
American Cyanamid Company
Agricultural Division
Research and Development Department Laboratories 15411
Moore, J
U. S. Public Health Training Grant 14924
Moraillon, P
Laboratoire Cooperatif National des Eleveurs 15414
Morton, D J
North Dakota Agricultural Experiment Station, Fargo 15141
Monlton, J
University of California
School of Veterinary Medicine
Dept. of Pathology 15416
Mulla, M S
Coachella Valley Mosquito Abatema
Coachella Valley Mosquito Abatement District, Riverside Cty. 14977
Nilsson, G I
Cornell University
Dept. Of Plant Pathology 15144
Olesiuk, O M
American Cyanamio Co., New York, N. Y.
Lederle Laboratories Division 15421
Olesiuk, O M
American Cyanamid Co., New York, N. Y.
Lederle Laboratories Division 15422
Osborne, C A
University of Minnesota
College of Veterinary Medicine
Dept. of Veterinary Medicine 15423
Page, L A
U. S. Dept. Of Agriculture
Agricultural Research Service
Animal Disease And Parasite Research Division 15425
Palmer, J M A
An Foras Taluntais, Moorepark, Fermoy, Ireland 15575
Palmer, J S
U.s. Dept. of Agriculture, Kerrville, Texas
Agricultural Research Service
Animal Disease and Parasite Research Division
Toxicological Investigations Laboratory 1561D
Phelps, W B
U.S. Department of Agriculture, Rhinelander, Wisconsin
Forest Service
North Central States Forest Experiment Station 15154
Pieper, G R
U.S. Department of Agriculture, Corvallis
Forest Service
Pacific Northwest Forest and Range Experiment Station 15576
Pittman, B
U. S. Department of Health, Education, and Welfare
Public Health Service
Communicable Disease Center 15438
Purvance, G T
U.S. Steel Corporation
Agricultural Department
Geneva Works 15445
Radomski, J L
University of Miami, Coral Gables
School of Medicine 1557B
Raun, E S
Iowa State University Of Science And Technology
Dept. Of Zoology And Entomology 14940
Renfro, B L
Rockefeller Foundation, New Dehli, India 15160
Richardson, L. T.
Dniversity Of California, Riverside
Dept. Of Plant Pathology 15162
Riekerk, R
Dniversity of Washington, Seattle
College of Forestry 15544
Robertson Jr, E S
San Jose State College, San Jose, Calif. 15163
Rolofson, G L
Virginia Polytechnic Institute, Blacksburg
Department of Entomology 15611
Roulston, W J
CSIRO
Veterinary Parasitology Laboratory
Division of Entomology 15506
Russell, B
University of Cape Town
Csir and Uct Virus Research Unit 1545B
Schaeffer, C W
Brooklyn College, N.Y.
Dept. Of Biology 14840
Schafer, M L
D.s. Public Health Service, Cincinnati
Robert A. Taft Sanitary Engineering Center
Milk and Food Research 155BD
Shelton, G C
University of Missouri
School of Veterinary Medicine
Dept. of Veterinary Microbiology
Dept. of Veterinary Pathology 15464
Siegel, B V
University of Oregon Medical School, Portland
Department of Pathology 15465
Silverstein, R M
U S Department of Agriculture
Agriculture Research Service
Market Quality Research Division 14954
Simpson, C F
National Heart Institute 15304
Sinha, A K
University of Kalyani, West Bengal, India
Department of Plant Pathology 15181
Skold, H H
Iowa State University, Ames
Graduate College 15305
Smith, F F
Cornell University, Farmingdale, N. Y. 151B9
Smith, H W
Animal Health Trust Stock, Essex, England 15467
Splittstoesser, C M
Public Health Service
National Institute Of Allergy And Infectious Disease 1496D
Stavely, J R
U.S. Dept. Of Agricultnre, Beltsville, Md.
Agricultural Research Service
Crops Research Division 15193
Stromberg, M W
U. S. Public Health Service, Bethesda, Md.
National Institute Of Neurological Diseases 153D6
Tanada, Y
National Science Foundation 14964
Tarshis, I B
U.S. Public Health Service
National Institutes Of Health
National Institute Of Allergy And Infectious Diseases 155D7
Teasley, J I
U.s. Department of the Interior, Athens, Georgia
Southeast Water Laboratory 15545
Tuhiash, H S
U. S. Fish And Wildlife Service, Milford, Conn.
Milford Biological Laboratory 15308
Tyo, R M
U.s. Public Health Service, Dauphin Island, Alahama
Division of Environmental Engineering And Food Protection
Shellfish Sanitation Branch

Gulf Coast Shellfish Sanitation Research Center 15583
Vaartaja, O
Southern Research Station, Maple, Ontario, Canada
Forest Pathology Laboratory 15205
Vadlamudi, S
Animal Husbandry Dept., Andhra State, India 15486
Walter, W G
U. S. Dept. Of Agriculture, East Lansing, Mich.
Agricultural Research Service
Poultry Research Branch 15490
Webster, R E
University Of Delaware, Newark 15215
Wheeler, G P
Southern Research Institute
Ketting-meyer Laboratory 15676
White, G
Wellcome Veterinary Research Station, Tunbridge Wells 15492
Wicker, E F
Washington State University, Pullman
College of Agriculture 15283
Williams, J C
Louisiana State University
Department of Tropical Medicine and Medical Parasitology
School of Medicine 15519
Williams, P H
Boyce Thompson Institute, Yonkers, N. Y. 15652
Wright, K A
Ontario Research Foundation, Toronto, Canada
Dept. Of Parasitology 14969
Yarwood, C E
University of California, Berkeley 15221
Zahran, G E D
Ministry Of Agriculture, Cairo, Egypt
Veterinary Research Laboratories 15498
Zahran, G E D
Ministry Of Agriculture, Cairo, Egypt
Veterinary Research Laboratories 15499
Zarkower, A
Canada Dept. Of Agriculture
Animal Diseases Research Institute
Health Of Animals Division
Animal Pathology Laboratories 15677
O1Meara, D C
American Cyanamio Co. 15500

Abbott, E V 14994
Abinanti, F R 15313
Ackland, D M 14800
Adams Jr, B S 15613
Adams, J B 14849
Adams, S V 15687
Adler, H E 15314
15363
Aicbele, M D 15616
Aizawa, K 14850
Akin, A 15602
Akin, B A 14989
Al-Hafida, R 14801
Allen, B 15064
Allen, D C 15250
Allen, E H 14995
Allen, I V F 15252
Allen, B C 15287
15351
Allen, R M 14996
14997, 14998
Allen, W R 14999
Allred, J N 15535
Altman, J 15000
Alziar, G 14802
Amaro de Sequeira, O 15001
Amerault, T E 15315
Andersen, J R 15357
Anderson, G W 15496
15497
Anderson, J B 14851
Anderson, L F 15002
Anderson, P J 15003
Andreasen, G 15693
Andrews, F N 15290
Angle, B J 15532
15533
Angstrom, C I 15340
Arakawa, A 15509
Arata, A A 15316
Arisumi, T 15004
Armstrong, G M 15005
15006
Armstrong, J C 15317
Armstrong, J K 15005
15006
Armstrong, W H 15318
15450
Aruga, H 14852
Asmar, J 15451
Asguith, 15223
Atkin, J D 15142
Atkins, M D 14853
Aube, C 15007
Autter, S H 15008
Axelrod, H 14978
Ayala, F J 14803
Aycock, B 15521
Azab, A K 14854
Babcock, W E 15395
Bache, C A 15656
Bagnall, R H 15009
Bailey, L 14855
Baker, C 15569
Baker, G A 15527
Baker, K F 15648
Baker, N F 15319
Banerjee, B 14856
Baniecki, J F 15010
Bankowski, R A 15320
15425, 15493
Oanttari, E E 15011
Barnes, A G 15555
Barnes, G L 15012
15013
Barnes, L E 15321
15322
Barnes, M M 14977
Barry, J R 15014
Bartb, R A J 15316
Bartba, A 15323
Bartlett, B R 15224
Bartlett, F J 14857
Bateman, D F 15207
Batty, I 15469
Batzer, H O 14804
Beal, V C 15535
Beame, F D 14986
Beasley, J N 15324
Beaumont, J De 14805
Beck, S D 14858
14886
Beckman, J R 15491
Belding, R C 15325
Bell, A A 15034
Bell, G L 15404
Bender, K 15614
Bennet-Clark, H C 14859
Bennett, C W 15080
Benson, N R 15244
Benson, W R 15661
Benton, W J 15326
15346
Beranger, G 15338
Berg, J 15314
Berg, J B 15363
Berg, L A 15615
Berger, H 15411
Berger, B D 15137
Bergold, G H 14860
Beroza, M 14915
15551, 15552, 15561
Berry, F H 14990
Berry, S J 14861
Berryman, A A 14806
Bertuzzi, P F 15550
15577
Betts, A O 15327
1532B, 15399
Bhaskaran, G 14926
Bigler, W J 15369
Bing, A 15189
Binns, W 15494
Bird, F T 14862
Bishop, J L 15611
Blaba, G 15140
Blodgett, E C 15015
15616
Bloom, J B 15139
Blum, M S 14807
Bobb, M L 15225
Boeckh, J 14863
Boehm, E 15058
Boothroyd, C W 15133
Borgatti, A L 14864
Borisova-Zinov:eva, 14808
Botts, B P 15427
Bourdin, P 15329
Bowman, M C 15551
15552
Boyazoglu, P A 15330
Boyd, A W 15016
Boyer Jr, C I 15331
Boyle, H W 15553
Bozarth, B F 15017
Bozicevich, J 15175
Brase, K D 15060
Brcak, J 14865
Breland, O P 14866
Brennan, E 15522
15538
Brennan, J M 15679
Bretbour, J R 15503
Brickey, P M 15534
Bringburst, R S 15018
Brinkman, B 15565
Broadbead, D M 15036
Bromfield, K B 15019
Brooks, O L 14940
Broome, A W 15288
Brown, A W A 14970
Brown, C J 15379
Brown, J A 15331
Brown, J F 15020
Brown, K W 14889
Brnbaker, B W 15080
Brumagen, D M 15072
Brungs, W A 15603
Bncber, G E 14867
15226, 15276
Buck, W B 15404
Bnening, G M 15374
Burbasb, G 15373
Burcbfield, E G 15158
Burcbfield, H P 15554
Burdin, M L 15510
Burges, H D 14929
15696
Burgess, L 14868
Burke, C N 15332
15333
Burke, O W 15185
Burke, J A 15550
15577
Burkbolder, W E 14954
Burmester, B R 15490
Burns, M J 15289
Burrage, R H 15227
Burts, E C 15244
Burttscbell, R H 15553
Busch, K A 15580
Butcher, J E 15390
Butler Jr, G D 14845
Byrne, R J 15419
Calavan, E C 15021
Callahan, P S 14869
Callantine, M B 15290
Callstrom, B C 15306
Calnek, B W 15334
15335, 15336, 15363
15462
Calpouzos, L 15022
15023
Campbell, J E 15580
Campbell, L 15057
Campbell, R N 15024
Candy, O J 14914
Canerday, T D 15228
Cantwell, G E 14849
14952
Cappellini, R A 15523
Carbrey, E A 15337
Carlson, A D 14870
Carlson, L E 15025
Carlson, W O 15376
Carpenter, J B 15021
Cascio, T 14871
Casida, L E 15288
Castelfranco, P 15277
Castillo, B S 15121
Cation, O 15026
Cavill, G W K 14872
Chadbourne, D S 14873
Chalkley, J H 15073
Chamberlain, R W 14983
Chang, P W 15349
Chang, S C 14874
Chapman, H C 14933
Chapman, B K 15284
15285
Chen, J T 15571
Chen, J-Y T 15657
Cherby, J 15338
Cherry, W B 15438
Chiang, H C 15229
Chomiak, T W 15339
15680
Christensen, C M 15524
15525
Christensen, J F 15319
Christiansen, D W 15021
Chute, H L 15340
15500, 15677, 15678
Claborn, B V 15565
Clark, C H 15289
15341
Clark, D S 15342
Clark, L G 15343
Clark, M C 15149
Clerx, W A 15279
Clondsley-Thompson, 14809
Clower, D F 15233
Cochran, D G 14944
Cochran, J H 15027
Coggins, L 15416
Cohen, C F 14913
Colberg, C 15022
15023
Cole, C R 15375
Cole, O W 15539
Coleman, O H 15036
Coleman, P H 14983
Collins, S M 15291
Collyer, E 14810
Colt, W M 15024
Connell, M C 15412
15480
Constant, K 15694
Cook Jr, P P 14821
Cook, F W 15344
Copaira, M 15347
Corbett, M K 15028
Cornelius, C E 15299
Corstvet, B 15320
Cory, L 15079
Cosgrove, J S 15291
Cosgrove, J S M 15291
Cotchin, E 15345
Conch, H B 15139
Coudriet, D L 15080
Cover, M S 15326
15340, 15346
Cox, P L 15511
Cox, W S 15545
Coyne, D P 15172
Cristea, J 15604
Crossan, O F 15010
15029, 15219
Crystal, M M 15501
15605
Cuba-Caparo, A 15347
Cueto, C 15555
15606
Cuming, F G 14811
Cnnningbam, C H 15490
Curley, A 15606
Cnrtis, R W 15673
Czech, F P 1565B
Da Massa, A J 15493
Da Silva, M E 15579
Dacres, W G 1534B
Daines, B B 15030
15031, 15032, 15522
15538
Dale, J L 15076
Dale, W E 15556
15606
Daly, J M 15033
15034, 15625
Danesb, D 15091
Dardiri, A B 15349
Das, C B 15035
Daubney, R 15350
Davis Jr, S H 150B7
Davis, J T 15542
Davis, J W 15351
Dawson, L 14878
Day, B E 15279
de Brnin, J 15695
De Iongb, H 15292
de la Vega, E 15347
Dean, D J 15293
Dean, J L 15036
DeBacb, P 15689
DeFoliart, G R 14B51
14875
DeLay, P D 15352
Delfel, N E 15022
15023
Delong, D M 14812
Deschenes, J 15007
Detweiler, O K 15427
DeVay, J E 15037
15136
deYakimac, A A 14989
15602
Diacbun, S 1503B
Dicke, R J 14813
Dickson, M H 15142
Dimond, A E 15654
Dobson, A 15659
15672
Docampo, O 15145
Dochinger, L S 15039
Docker, T M 1484B
Doeung, S T 15040
Domermuth, C H 15353
Domscb, K B 15041
Done, J 15354
Done, J T 15355
Donley, O E 15230
Dorfman, E 15670
Dorsey, C K 14814
Dorward, K 14991
15231, 15232, 15557
Dougherty 3rd, E 15356
Dowler, W M 15042
Druge, J B 15400
Drummond, R O 15502
Duffus, J E 15043

Dumas,w T

Dumas,w T 15278
Duncan, C G 15044
Duncan, J 8 15357
Dunleavy, J M 15045
Dunlop, W 8 15358
Durham, W F 15559
Dye, J L 15697
Edds, G T 15410
Edgington, L V 15660
Eichelberger, J W 15665
Eichmeier, J 14876
Eidelman, M 15558
Eidson, C S 15311
Eisenberg, W V 15534
Elam, G W 15400
Ellenby, C 15254
Elliott, J W 15559
Ellis, E M 15359
15360
Ellis, L F 15617
Emge, 8 G 15681
English, H 15145
English, W H 15037
Epling, G P 15361
Epps, N A 15496
15497
Ettinger, G 15086
Ewing, A W 14859
Exline, 8 14815
Faber, J E 15384
Fabricant, J 15331
15362, 15363, 15364
15365
Fairchild, M L 15246
Fallin, E 15560
Fang, S C 14992
15560
Fassel, H 15457
Feaster, J P 15297
Featherston, P E 14887
Fehringer, N V 15562
Felix, E L 15046
Fellows, H 15047
Fenner, L M 15255
Ferguson, A E 15412
15480
Fernandez, A T 14877
Ferris, J M 15048
Fieldhouse, D J 15219
Fields, M L 15134
Fievez, L 15536
Findlay, W P K 15529
Finlayson, T 14830
Finney, G L 14878
15690
Finocchiaro, J M 15661
Fischer, F S 15582
Fiserova-Bergerova, 15578
Fisher, E G 15151
Fitzgerald, P R 15366
Flentje, N T 15049
15648
Flowers, A I 15413
Floyd, E 8 14816
15233
Foil, R 8 15050
Foote, L E 15461
Ford, H 8 14817
14967
Ford, J H 15561
Ford, R E 15051
15052
Fordyce Jr, C 15618
Fox, L E 15488
Francis, D W 15367
Fraser, G 15368
Frazier, M N 15389
15512
Frederickzen, R A 15053
Fregly, M J 15607
French, A 14879
Frey, R A 15396
Freytag, F H 14812
Fridlund, P R 15054
Friedman, A 8 15619
Frolich, E F 15021
Frosheiser, F I 15055
Fry, D E 15349
Frye, R D 15234
Fujimoto, M S 14890
Fujisawa, I 15056
Fukuda, S 14852
Fulton, J P 15076
Funnell, H S 15574
Furman, W 8 15562
Futrell, M C 15161
Gabrielson, R L 15057
Gahagan, J 15602
Gahan, J 8 14817
Gainer, J H 15369
15682
Gale, G O 15411
Galton, M M 15309
Gambrell, F L 14818
Garber, M J 14977
Garcia, R S 14880
Garside, J S 15370
Gaston, L K 14881
14882
Gaul, H 15614
Geer, J C 15461
Geier, P W 14993
Gennaro, J F 15297
Gentry, J W 15235
15236
Genung, W G 15513
15683
George, J L 15563
Germaine, F W 15535
Gessel, S P 15539
Getzin, L W 15237
Ghenne, P 15536
Ghosh, A 15159
Gibson, I A 15058
Gibson, T E 15355
Gill, C C 15059
Gill, E 15371
Gillies, P A 14973
Gilmer, R M 15060
Gilmore, J E 14883
15238
Gilmore, V 15477
Gingrich, 8 E 15504
Glantz, P J 15372
15373
Glick, P A 14884
Godar, E M 15628
Godfrey, J F 15342
Goerlitz, D F 15540
Golanski, K 14885
Golastrohm, P D 15620
Golato, C 15061
Gold, A H 15062
Goldberg, H S 15317
Gonzales, C Q 15089
Gonzalez, 8 H 14843
Good, J M 15256
Goode Jr, E R 15315
Goode, R B 15311
Gordon, N 15294
Gordon, R F 15370
Gorham, J R 15385
Gorman, J E 14954
Gossett, F O 15321
15322
Goth, R W 15218
Gothilf, S 14886
Gouck, H 14915
Goud, Jv 15621
Graber, M 15514
Gracian, M 15316
Graham, A 8 14824
Graham, H M 14880
Graham, J H 15063
Graham, S O 15064
Grant, C D 14970
Granville, A 15536
Gratzek, J 8 15374
Gray, 8 A 15662
15684
Green Jr, R J 15065
15618
Green Jr, V E 15530
Greene, G L 15066
Griesemer, R A 15375
Griffin, G D 15273
Griggs, W G 15089
Griner, L A 15376
15377, 15378
Grogan, R G 15130
15198
Gross, S 15067
Grover, 8 K 15622
Gulli, R 15120
Gupta, A P 14986
Gupta, D S 15541
Gutenmann, W H 15564
Guthrie, J W 15068
Gutter, Y 15069
15259
Guyer, G 14876
Guyer, G E 14864
Gyles, N 8 15379
Gyrisco, G G 14819
Haas, J H 15623
Haas, R H 15282
Haasis, F A 15257
Hadden, S J 15115
Haeger, J S 14974
Hagedorn, D J 15049
Hagley, E A C 14820
Hagmann, L E 14985
Haines, C E 15513
Halfhill, J E 14887
Halisky, P M 15070
Halliwell, R S 15071
Halpin, J E 15002
Hamilton, C M 15394
Hamilton, R D 15401
Hammond, G H 14868
Hammond, J W 15663
Hampton, R E 15072
Hancock, J G 15624
Hanlin, R T 15073
Hansbrough, T 15050
Hanson, E W 15193
Hanson, L E 15302
15417
Hanson, R P 15486
Hantschel, H 15323
Hapke, H J 15608
Hardeland, R 14941
Hare, W C D 15295
Harein, P K 14888
Harms, R H 15304
Harrap, K A 14889
Harris Jr, E D 15683
Harris, E J 14890
Harris, P 15276
Harrison, M D 15111
Hart, J H 15105
Hart, W G 14890
Harvey, T L 15503
Hasenoehrl, S G 14821
Hashimoto, Y 14852
Haufler, M 15609
Hawk, H W 15296
Hawkins, J D 15380
Hayes, R O 15685
Hazeltine, W 15239
Heddleston, K L 15381
15382
Hedin, P A 15637
Heishman, J O 15383
Hejl, J M 15384
Hellenbrand, K 14891
Helmboldt, C F 15339
15388, 15680
Helton, A W 15074
15075, 15258
Hendrix, J W 15076
15077, 15625
Henneberry, T J 15270
Henson, J B 15385
Henson, L 15038
Heotis, J P 15511
Hepting, G H 15078
Hernandez, T P 15123
Hertig, M 14899
Herve, P 14822
Heuberger, J W 15215
Heuschele, W P 15299
Hewitt, W B 15079
Higgins, D J 15004
Higinbotham, W A 15297
Hildebrand, D C 15171
Hill, K L 15280
Hills, O A 15080
Hines, J A 15410
Hines, N W 15548
Hitchner, S B 15495
Hoag, W G 15386
Hobert, V 15405
Hocking, D 15081
Hodges, 8 W 14823
Hodgeson, E 14892
Hoekstra, W G 15446
Hoerlein, A R 15387
Hoff, J K 15062
15259
Hoffman, R A 15240
15504
Hokama, Y 14988
Holcomb, 8 14893
Holdaway, F G 15229
Hollifield, R D 15511
Hollister, C J 15343
Holmes, F O 15083
Holmes, F W 15626
Holowczak, J 15627
Holway, R T 14975
Hoof, J Van 15536
Hoogstraal, H 14828
Horton, J C 15084
8ouse, R L 14824
Howe, P M 15531
Howes, J R 15297
Huang, S S 14963
Huang, Y M 14825
Huhben, K 15427
Huffman, C W 15628
Huger, A 14894
Hughes, J S 15542
Hughes, J T 15241
Huisenga, J 14846
Hukuhara, T 14852
Humphreys, T W 15675
Hunter, P E 14826
Hunter, R C 14815
Hurd, P D 14827
Husain, A 15085
Hussey, N W 15241
Hwang, J 15388
Hyre, R A 15086
15087
Ignoffo, C M 14895
Iida, S 14850
Irzykiewicz, H 14934
Ishii, S 14896
Ishizaki, R 15476
Ismail, I I 14854
Ivey, M C 15565
Jackson, C R 15088
Jacobs, R E 15389
Jacques, R P 15242
Jaffer, A A 15081
James, L F 15390
Jangi, R S 14897
Jarrett, W F H 15391
Jehnich, H 15334
15335
Jenkins Jr, J M 15521
Jenkins, W R 15265
Jennings, A R 15327
Jennings, F W 15391
Jensen, D D 15089
Jensen, H L 15543
Jensen, H P 15572
Jensen, R 15305
15392
Jensen, S G 15033
Jeoffery, S M S 15393
Jerstad, A C 15394
Jessen, E 14898
Jewell, F F 15090
Jewell, H K 15080
Jobbins, D M 14985
Johnson, D E 15260
15554
Johnson, G V 15189
Johnson, P T 14899
Johnson, R E 15298
Jones, L G 15123
Jordan, J W 15664
Jordan, L S 15279
Jordan, R M 15330
Judge, F D 15243
Judson, C L 15686
Juhasz, M 15323
Jungherr, E L 15332
15333

Kabana, R R 15664
Kahn, R P 15175 15189
Kaiser, M N 14828
Kaiser, W J 15091
Kamakahi, O 14890
Kamps, L 15550
Kaneko, J J 15299
Kantzes, J G 15092
Kaplanis, J N 14896 14922
Kappus, K D 14900
Kasemhre, J N E 15629
Katz, S E 15566
Kaufman, D D 15093 15567
Kavenagh, J F 15291
Kawahara, F K 15665
Kawamoto, S O 15094 15451
Kay, E N E 15659
Kearns, C W 14874
Keil, H L 14901 15186
Kelman, A 15119 15630
Kempe, C H 15415
Kendrick Jr, J E 15138
Kenzy, S G 15393 15420, 15479
Kernkamp, M F 15160
Kerr, A 15095
Kiesling, E L 15096
Kilgore, W W 14930
Kilian, J G 15395
Kilpatrick, R A 15097 15098
Kimble, K A 15198
King, J 15205
King, T H 15025
Kinman, M L 15199
Kintner, L D 15464
Kirk, T K 15630
Kirkbride, C A 15396
Kirkpatrick, H C 15099
Kitaguchi, G E 15685
Kitchell, R L 15306
Klein, A K 15571
Kleinschmidt, W J 15617
Kling, J M 15341
Klisiewicz, J M 15100
Kludy, D H 15124
Knight, K L 14976
Knipling, E F 15266
Knutson, K W 15111
Kohayashi, K 15385
Konlynyk, E W 14902
Kodgson, W A 15631
Koenig, R 15101
Kohls, G M 14828
Kondos, A C 15397
Konev, Yu E 15666
Kosikowski, F V 15575
Kotheimer, J R 15102
Koths, M E 15301
Kottaridis, S D 15358
Kralik, O 14865 15333, 15339, 15680
Krauss, W C 15346
Kraybill, W H 15409
Kreier, J P 15398
Kresse, J I 15343
Krupka, L R 15034
Krywienczyk, J 14903
Kuc, J 14995 15627
Kuhn, C W 15103
Kumar, D 15104
Kumar, S S 14892
Kuntz, J E 15154
Kurtzman Jr, E H 15632
L'Arrivee, J C M 14904
L'Ecuyer, C 15474
Lacoste, L 15140
Ladisch, E K 15531
Ladisch, S K 15531
Lagace, C F 15224
Lake, E S 15326
Lal, J R 15311
Lal, K 14829
Lal, S 14918
Lamar, W L 15540
Lambert, G 15315
Lamont, P H 15399
Landis, W R 15105
Landram, J F 15515
Langlois, E E 15568
LaPlaca, M 15415
Larson, R H 15273
Lauder, I M 15489
Lawlor, S 15000
Laws, G F 15516
Layton, J M 15436
Leach, C M 15633
Lear, Bert 15260
Leather, R I 15106
Lehen, C 15107
Ledger, M 15058
Lee, D C 14905
Lee, G G 15449 15451
Lee, V H 15486
Leland, S E 15400
Lemin, A J 15619
Leonard, O A 15667
Leone, I 15522
Leone, I A 15538
Levine, P P 15363 15365
Levine, S 15401
Lewis, G D 15108 15109
Lewis, L F 14971
Lhoste, J 14906
Libby, J L 14907
Liebermann, H 15323
Lilly, V G 15615
Lindauer, M 14917
Linder, D 15687
Linder, R C 15099
Lindner, R L 15244
Lindsey, D 15634
Linero M, M Q De 14908
Linsey, N 15113
Linsley, E G 14827
Lisk, D J 15564 15656
Liska, R J 15568
Liu, S C Y 15110
Livingston, C H 15111
Livne, A 15112 15625
Lloyd, M K 15473
Lobl, K 15431
Loebenstein, G 15113
Lohmann, M 14909
Lokolo, A 15536
Longworth, J F 14889
Lopez F., L C 15525
Lopez, F 14842
Lorbeer, J W 15094
Loschiavo, S R 14910
Louloudes, S J 14923
Low, D G 15423
Lucas, J M S 15402
Luepschen, N S 15151
Luginbuhl, R E 15332 15333, 15339, 15388 15680
Luke, H H 15114 15115
Lukens, R J 15116
Lukezic, F L 15037
Luttrell, E S 15063
Luvisi, D A 15526
Lynch, J E 15403
Lysenko, O 14911
Mace, M E 15117
Mackauer, M 14830
MacKintosh, D O 15464
MacLeod, J 15087 15215
MacPhee, A W 14912
MacSwan, I C 15071
Maduewesi, J N C 15118
Magee, W E 15401
Maggenti, A R 15261
Mahlau, E A 15350
Mahoney, D F 15517
Mai, W F 15082 15259
Maine, E C 15119
Maisel, J 15415
Maki, W A 15679
Malca, I 15120
Mallett, S L 15090
Mann, R M 15685
Mansfield, M E 15387
Manthei, C A 15315
Maramorosch, K 15121
Marlatt, R B 15122
Marshak, R R 15343
Marshall, V L 15404
Martin, D F 14880 14884
Martin, W J 15014 15123, 15262
Mason, L F 15233
Matheny, W H 15124
Mathey, W J 15479
Matisheck, P H 15405
Matsni, C 15056
Matthews, T R 15406
Mattson, A M 15555 15569
Maxwell, D P 15207
Mayer, A 14913
Mayer, R J 14914
Mayhew, R L 15519
McBeth, C A 15609
McCarty, R T 15609
Mcclymont, G L 15397
McCombs, C L 15125
McCrum, R C 15126 15635
Mccune, E L 15520
McDaniel, A T 15127
McOaniel, L S 15678
McDonald, H H 14996
McDonald, I 15659
McDonald, L E 15300
McEwen, F L 14960
McGhehey, J H 15245
McGovern, T P 14915
McGrath, H 15128
McGuffin, W C 14831
McGuire, T C 15385
McIntyre, W I M 15391
McKenzie, A R 15648
McKittrick, R T 15122
McLean, D M 15129
McMullen, R D 14916
McMurtry, J A 14832
McNutt, S H 15288
Meade, R J 15330
Medina, A C 15130
Medler, J T 14833
Medugorac, I 14917
Meher, G M 15455
Mehrotra, K N 14918
Meier, E J 15570
Meinecke, C F 15300
Mejia, M J 15432 15433
Meleney, W P 15407
Mendel, J L 15571
Mendlowski, R 15408 15409
Menzies, J A 15227
Mercer, H O 15410
Merkle, O G 15098
Merrifield, R G 15050
Messersmith, R E 15411
Metzger, E G 14919
Micks, D W 14920
Milbrath, J A 15035
Miles, C I 15550
Miley, J L 15379
Millar, R L 15624
Miller, G W 15217
Miller, O V 15401
Miller, P 15131 15263, 15636
Miller, P M 15264
Miller, R E 15132 15133
Miller, V A 15392
Millikan, D F 15134
Minyard, J P 15637
Mirocha, C J 15135 15136, 15653
Mishra, M D 15159
Miskus, R P 15576
Mitchell, J A 14857
Mitchell, J E 15137
Mitrovic, M 15405
Mittler, T E 14921
Mock Jr, L G 15668
Moffitt, C 14950
Moje, W 15138
Molello, J A 15392
Moller, W J 15145
Mongean, J O 15412
Monnier-Cambon, J 15329
Monroe, R E 14922 14923
Moore, B 15502
Moore, J 14924 14968
Moore, J O 15137
Moore, L D 15139 15638
Moore, R W 15324 15413
Moraillon, P 15414
Morehart, A L 15029
Moreland, D E 15280
Morgan, C V G 15532
Morgan, G V G 15533
Morquer, R 15140
Morrill, A W 14975
Morris, G K 14925
Morrison, S M 15454
Mortensen, J A 15168
Mortimer, P H 15354
Morton, D J 15141
Moscovici, C 15415
Motohashi, T 15475
Mouhry, R P 15572
Moulton, J 15416
Mount, D I 15603
Mueller, K E 15091
Mueller, W C 15101
Mulla, M S 14977 14978, 14979, 15573
Mulligan, W 15391
Mulrennan, J A 14980
Munnecke, O E 15162 15669
Munroe, E 14834
Murty, D K 15310 15417
Musick, G J 15246
Myrdal, G R 15572
Nagel, W P 15245
Nair, K K 14926
Nakata, G 15424
Narotsky, S 15373
Natti, J J 15142 15143
Neal, F C 15410
Nelson, K E 15527
Nerney, N J 15247
Neunzig, H H 14927
Newcomer, J S 15670
Newell, I M 14969
Newell, K W 15316
Newhook, F J 15078
Nichols, R E 15457
Nickle, W R 14928
Nilsson, G I 15144
Nolan, V J 15418
Nome, S F 15145
Norcross, N L 15428
Norris Jr, D M 14947
Norris, J R 14929
O'Brien, M J 15146
O'Meara, D C 15691
Oberlander, H 14861
Oden, W R 14996 14997
Odihirin, R A 15265
Offerman, G P 15248
Ogata, M 15419
Ogawa, J M 15147
Okazaki, W 15420
OLesiuk, O M 15421 15422
Olive, A T 14981
Oliver, W T 15574
Olson, E O 15129
Olson, N O 15383

Oppenheim, A

Oppenheim, A 15277
Orellana, B G 15148 15199
Orr, C C 15266
Osborne, C A 15423
Ose, E E 15322
Osebold, J W 15319
Oteifa, B A 15267
Ouye, M T 14884
Owen, J H 15639
Ozawa, Y 15424
Packer, B A 15337
Page, L A 15425
Page, O T 15149
Painter, B B 14930
Palmer, J M A 15575
Palmer, J S 15610
Palti, J 15166
Papavizas, G C 15150
Pappelis, A J 15248
Parker, K G 15151
Parsons, P A 14931
Paterson, A B 15426
Patterson, O P 15427
Patterson, M E 15064
Patton, B F 15104
Patton, B L 14932
Patty, B E 15428
Pearce, G W 15569
Peckham, M C 15429
Penick, A E 15559
Pennell, J T 14921
Perek, M 15430
Perk, K 15431
Perman, V 15423
Perry, V G 15268
Petermann, H G 15338
Petersen, D H 15042
Petersen, J J 14933
Peterson, D A 15298
Peterson, J L 15152
Peterson, B S 15153
Pfabler, P L 15115
Phelps, W B 15154
Philippo, W 15320
Phillips, P H 15446
Pieper, G B 15576
Pier, A C 15432 15433
Piercy, S E 15434
Pilchard, E I 15435
Pine, T S 15155
Pipber, B E 14925
Pirone, T P 15084
Pirtle, E C 15436 15437
Pittman, B 15438
Plackett, P 15439
Plastridge, W N 15301
Plumber, G J 15313
Poelma, P L 15537
Pointer, G B 15191
Porter, M L 15577
Portocarrero, C A 14807
Pound, G S 15084 15100
Powell, O 15173
Powning, B F 14934
Prasertphon, S 14935
Prewitt, J M 15440
Price, J 15441
Price, J I 15356
Price, K E 15442
Price, W C 15028
Prier, J E 15443
Prior, G O 15639
Prochazka, Z 15444
Protalio, D B 15156
Provvidenti, B 15157
Pruess, K P 14835
Purvance, G T 15445
Putman, W L 14936
Putman, Wm L 14937
Puttler, B 14878
Pyke, B E 15446
Rackham, B L 15272
Radomski, J L 15578
Radostits, O M 15447
Raggi, L G 15448 15449, 15450, 15451
Rai, K S 14972
Rainey, R C 14836
Ramazzotto, L J 14938
Randolph, N M 14877
Rankin, H W 15640
Ranney, C O 15158
Raun, E S 14939 14940, 15234
Ravenscroft, A V 15137
Rawitz, E 15166
Rawling, W A 15541
Raychaudhuri, S P 15159
Raymer, W B 15146
Read, D C 15249
Reddy, O V B 15182
Redit, W H 15188
Reeves, W C 14837
Reid, B H 15665
Reilly, C 15641
Reisinger, R C 15382, 15452
Renfro, B L 15160
Rensing, L 14941
Reyes, L 15161
Rich, S 15196
Richards, A G 14942
Richardson, L. T. 15162
Richardson, M D 15355
Riekerk, H 15539 15544
Ristic, M 15310 15398, 15453
Rivers, G W 15199
Robbins, W E 14896 14922, 14923, 14952
Roberts, E D 15474
Robertson Jr, R S 15163
Robertson, J M 15469
Robertstad, G W 15454
Robinson, A G 14943
Rochow, W F 15164
Rodin, J O 14954
Rodrigo, W R F 15095
Roesel, Of 15455
Rogers, A J 14980
Rogoff, W M 15505
Roistacher, C N 15021
Rolofson, G L 15611
Roneus, Otto 15456
Rose, J H 15518
Rose, W E 15165
Rosen, A A 15553
Rosen, W G 15457
Rosenberger, J K 15326
Rosenbusch, B F 15374
Ross, A F 15051
Ross, H H 14838
Ross, J P J 14848
Ross, M H 14944
Rotem, J 15166
Roth, A R 15505
Roth, E E 15687
Rothenbuhler, W C 14971
Rothkirch, H 15121
Rothschild, G H L 14945
Roulston, W J 15506
Royse, H H 15675
Rozemeyer, B 15352
Rudinsky, J A 15250
Rudolph, K 15642
Rudolph, Td 15643
Ruehle, J L 15269
Rumsey, R R 15405
Russell, B 15458
Ryckman, R E 14839
Sa, F 15579
Salisbury, P J 15204
Samejima, T 15475
Sanchez-Riviello, M 14842 14946
Sandefur, J R 15369
Sanford, K H 14912
Sanger, V L 15325
Santana, F J 14975
Sass, E 15411
Sasser, J N 15257
Saunders, J L 14947
Saxena, S P 15387
Schaaf, K 15459
Schaeffer, C W 14840
Schafer, M L 15580
Schalm, O W 15477
Schechter, M S 14948 14984
Schein, R O 15167
Schenck, N C 15168
Schieber, E 15169
Schindler, A F 15270
Schlegel, O E 15190
Schmittle, S C 15311
Schmitz, H 15671
Schnathorst, W C 15070
Schneider, H 15089
Schneider, I E 15170
Schneiderman, H A 14861
Schoof, H F 14987
Schricker, B L 15302
Schroeder, W T 15143 15157
Schroth, M N 15171
Schulz, J T 14949
Schulze, P 15323
Schuster, M L 15172
Scott, O H 15173
Scott, G B 15492
Scott, H A 15174 15175
Scott, H G 15460
Scott, W L 15461
Scriven, G T 14832 14950
Secher, K 14841
Seeger, K C 15466
Segall, R H 15176
Segre, D 15408 15409
Sehgal, O P 15655
Seliskar, C E 15039
Sellers, A F 15672
Sellers, R F 15434
Service, J 15514
Sesaki, K 15303
Sevoian, M 15462 15463
Shagrun, M A 15070
Shalla, T A 15177
Sharma, V P 14972
Sharp, N 15341
Sharp, N C C 15391
Shatla, M N 15178 15644
Shaver, B J 15515
Shaw, J G 14842 14946, 14950
Shaw, Z A 14857
Sheets, L W 15253
Shelley, S 15179
Shelton, D C 15383
Shelton, G C 15464
Shepherd, R F 14951
Sherman, I 15293
Sherwood, R T 15645
Shiffman, R 15281
Shimizu, T 15476
Shipton, W A 15020
Shoemaker, P B 15109
Shortino, T J 14952
Shvetsova, O I 14953
Siegel, E V 15465
Silber, G 15180
Silberschmidt, K M 15110
Silverstein, R M 14954
Simmons, P 15581
Simpson, C F 15304
Sinclair, J B 15644
Singh, Kamla 15172
Singh, S S 14955
Sinha, A K 15181
Sinha, B C 15182
Sippell, W L 15214
Sisler, H O 15206
Sitterly, W R 15183
Sivasubramanian, P 14926
Skaff, V 14959
Skamser, L M 15466
Skold, R H 15305
Skotland, C B 15184 15185
Smale, B C 14901 15186
Smalley, E B 15187
Smibert, R M 15351
Smirnoff, W A 14956 14957
Smith Jr, B J 15646
Smith Jr, W L 15188
Smith, C N 14962
Smith, F F 15189
Smith, G N 15582
Smith, B W 15467
Smith, J S 15489
Smith, L 15254
Smith, L M 14843
Smith, M E 14958
Smith, R H 15251
Smith, R J 15528
Smith, S C 15358
Smith, S H 15190
Smith, V E 15394
Smoot, J J 15176
Snoeybos, G H 15340
Sojka, W J 15473
Soles, B L 14888
Sommer, N F 15526
Soulebot, J P 15338
Sowell Jr, G 15191
Sperling, F G 15471 15472
Spielman, A 14959
Spillane, J T 15569
Spishakoff, L M 14842
Splittstoesser, C M 14960
Stahmann, M A 15650
Staples, R C 15192 15652
Stavely, J R 15193
Steck, W 15468
Steele, A E 15688
Stein, B 15534
Steiner, G W 15647
Steinhaus, E A 14961
Stemp, A R 15568
Sterne, M 15469
Stierli, H 15665
Stimmann, M W 15194
Stob, M 15290
Stoddard, E M 15116 15264
Stokes, G M 14982
Stoliker, H E 15309
Stolzy, L H 15272
Stone, R D 15371
Storherr, R W 15601
Storrs, E E 15554
Stover, D E 15470
Stover, L H 15168
Straw, J A 15607
Street, J C 15390
Stretch, A W 15523
Stretton, H M 15648
Strobel, G A 15649
Stromberg, M W 15306
Strout, R G 15358 15491
Stubbs, E L 15471 15472
Sudia, W D 14983
Sullivan, W N 14948 14962, 14984
Sulzbach, O 14976
Suseno, R 15072
Sutherland, D J 14985 14986
Svoboda, J 14865
Swanson, L E 15488
Sweeney, E J 15473
Swenson, K G 15194
Switzer, W P 15474
Sykes, J F 15296
Szuszkiewicz, T E 15272
Tabo, R 15514
Tajima, M 15475 15476
Takahashi, N 15673
Takahashi, W N 15208
Tamashiro, M 14963
Tammen, J 15195
Tanada, Y 14964
Tarshis, I B 15507
Tashiro, H 14883

Tawfik, M P S 14854
Taylor, A 15354
Taylor, G S 15196
15264
Taylor, J 15197
Taylor, K L 14965
Taylor, P J 15336
Taylor, R H 15198
Taylor, R T 14987
Teasley, J I 15545
Terriere, L C 15250
Thakur, R N 15085
Theilen, G H 15477
Theis, T 15022
15023
Theisen, F 14992
Thomas, C A 15199
Thomas, K K 14966
Thompson, A 15469
Thompson, A C 15637
Thompson, H E 15612
Tinsley, T W 14889
Toda, H H 15200
Toole, E R 15271
Torell, P J 15282
Torgeson, D C 15628
Tourtelotte, M E 15389
Transtrum, L G 15445
Tremaine, J H 14999
Trenchi, H 15478
Tripathy, S B 15479
Trnehlood, M S 15406
Trujillo, E E 15037
Trujillo, P 14842
Truscott, R R 15412
15480
Trussell, P C 15252
Truszczynski, M 15307
Tsyganov, V A 15666
Tubiash, R S 15308
Tucker, J F 15370
Tumlinson, J H 15637
Turner, G D 15296
Tyler, D E 15357
Tyo, R M 15583
Underwood, G R 14844
University Of Maine, 15677
Urie, A L 15222
Vaartaja, O 15204
15205
Vadlamudi, S 15486
Valenta, J R 15206
Van Der Maaten, M J 15357
Van Etten, H D 15207
Van Gundy, S D 15272
Van Kammen, A 15208
Van Kampen, K R 15487
Van Roekel, H 15421
15422
Vaughn, J B 15316
Vavra, J F 15248
Venard, C E 14900
Vincent, M 15174
Vincent, M M 15175
Volcani, Z 15209
15210
Voros, J 15211
Voth, V 15018
Wade, A E 15488
Wadsworth, D F 15212
Wagington, J 15489
Wagner, J R 15675
Walden, C C 15252
Walker, J R 14848
Walker, J W 15535
Walker, K C 15559
Walker, S J M 15508
Walkinshaw, C H 15273
Wallbank, A M 15471
Walter, W G 15490
Walton, G S 15523
Walton, M S 15571
Washino, R K 14988
Waters, I W 15607
Watkins, J R 15324
Watson, R S 15582
Watson, R D 15213
Watson, W Y 15214
Watts, E R 15601
Weaver, L O 15092
Webb, R E 15218
Weber, C R 15045
Weber, D J 15650
Weber, G F 15040
Webster, R E 15215
Wedman, E E 15360
Weidhaas, D E 14967
Weierich, A J 15662
Weil, E D 15670
Weinhold, A R 15216
Weinstein, L H 15017
Welkie, G W 15217
Wells, J M 15092
Wene, G P 15253
Werner, P G 14845
Wester, R E 15218
Weston, C R 15491
Wharton, R H 15506
Wheeler, G P 15676
Wheeler, H 15651
White, E R 15689
White, F H 15309
White, G 15492
White, K E 14973
White, R E 15547
Wichman, R W 15493
Wicker, E F 15283
Wiebel, F J 15219
Wijers, D J R 14846
Wilheim, S 15018
Willers, E H 15432
15433
Williams, E R 15627
Williams, J C 15519
Williams, L P 15301
Williams, M C 15494
Williams, P H 15652
Williams, P J 14872
Willrich, T L 15548
Wills, C G 15480
Wilson, E E 15135
Wilson, E F 15136
Wilson, H G 14847
Wilson, J D 15220
Wilson, R A 14901
15186
Winstead, N N 15125
Winter, A J 15288
Winterfield, R W 15495
Wiseman, J S 14983
Wistreich, G A 14924
14968
Woke, T R 14983
Womeldorf, D J 14973
Wood, R K S 15181
Woodard, D R 14933
Woodley, C H 15341
Woods, L K 15437
Woods, W D 15520
Wrich, M J 15502
Wright, K A 14969
Wright, M L 15496
15497
Wyant, Z N 15400
Wyatt, I J 15241
Yalcin, N 15414
Yamaguchi, A 15056
Yamaguchi, S 15277
Yamamoto, R 15395
Yang, S F 15217
Yarwood, C E 15059
15221
Yassin, A M 15274
Yates, V J 15349
Yates, W E 15147
Yeoman, G H 14848
Yeomans, A H 14948
14984
Zahran, G E D 15498
15499
Zak, B 15275
Zaki, A I 15653
Zarkower, A 15677
Zaumeyer, W J 15174
Zentmyer, G A 15138
Zimmer, D E 15222
Zirk, E 15227
Zolli Jr, Z 15442
Zscheile Jr, F P 15120
Zucker, M 15654
Zurahova, E R 14953
01Meara, D C 15500

Agricultural Experiment Station
University Of Idaho 15258
Agricultural Marketing Service
Horticultural Crops Branch
U. S. Dept. Of Agriculture, Orlando, Fla. 15176
Agricultural Research Center, Beltsville, Md.
Agricultural Research Service
Animal Husbandry Research Division
Dairy Cattle Research Branch 15296
Agricultural Research Council
Pest Infestation Laboratory 15696
Agricultural Research Service
Crops Research Division
U. S. Dept. Of Agriculture, Beltsville, Md. 15199
Agricultural Research Service
U. S. Dept. Of Agriculture
Entomolcgy Research Division 14962
Agricultural Research Service
U. S. Dept. Of Agriculture, Beltsville, Md.
Entomolcgy Research Division 1527D
Agricultural Research Service
U. S. Dept. Of Agriculture, Raleigh, N. C. 15645
Agricultural Research Station, Rehovot, Israel 15113
American Cyanamid Co., Princeton, N. J.
Agricnltural Division 15466
American Cyanamid Company, Princeton, N. J.
Agricnltural Division
Research and Development Department Laboratories 15411
American Scientific Laboratories, Inc., Madison, Wis. 15495
Anti-Locust Research Center, London 14836
Arizona Agricultural Experiment Station, Mesa
Dept. Plant Pathology 15122
Armed Forces Institute Of Pathology, Washington, D. C. 153D5
Atomic Energy Establishment, Trombay, Bombay, India
Biology Division 14926
Auburn University, Ala.
Dept. Of Animal Disease Research 15348
Auburn University, Ala.
School Of Veterinary Medicine
Dept. Of Physiology And Pharmacology 15289 15341
Boyce Thompson Institute, Yonkers, N Y 15067
Boyce Thompson Institute, Yonkers, N. Y. 15D17 15192
Bristol Myers Company, New York, N.y. 15671
C.s.i.r.o. Veterinary Parasitology Laboratory, Brisbane
Division of Animal Health 15517
Cairo Dniversity, Giza
Dept. Of Plant Protection 15267
California Dept. Of Agriculture, Lancaster, California
Poultry Pathology Laboratory 15318
California State Dept. Of Public Health
Bureau Of Vector Control 15686
Canada Agriculture Research Station, Fredericton 150D9
Canada Agriculture Research Station, Saskatoon, Saskatchewan
Forest Biology Section 15204
Canada Dept. Of Agriculture Research Station, New Brunswick 15631
Canada Dept. Of Agriculture Research Station, Winnepeg 1491D
Canada Dept. Of Agriculture, Belleville
Entomology Research Institute For Biological Control
Research Branch 15276
Canada Dept. Of Agriculture, Belleville
Research Institute 14824
Canada Dept. Of Agriculture, Belleville, Ontario
Research Branch
Entomology Research Institute For Biological Control 14867 15226
Canada Dept. Of Agriculture, Belleville, Ontario
Research Branch
Research Institute 14928
Canada Dept. Of Agriculture, Belleville, Ontario
Research Institute 14830
Canada Dept. Of Agriculture, Brandon, Manitoba 14904
Canada Dept. Of Agriculture, Fredericton, New Brunswick
Research Station 15149
Canada Dept. Of Agriculture, Kentville, N. S.
Research Station 14912
Canada Dept. Of Agricultnre, Kentville, Nova Scotia
Research Station 15242
Canada Dept. Of Agriculture, La Pocatiere, Quehec 15007
Canada Dept. Of Agriculture, Ottawa
Entomology Research Institnte 14834
Canada Dept. Of Agricultnre, Prince Edward Island
Research Laboratory 15249
Canada Dept. Of Agriculture, Snmmerland, British Columhia
Research Station 14916
Canada Dept. Of Agriculture, Vineland Station, Ontario
Research Station 14936
Canada Dept. Of Forestry, Sault Ste. Marie, Ontario
Insect Pathology Research Institute 14903
Canada Dept. Of Forestry, Sillery, Quehec 14957
Canadian Dept. Of Agriculture, Harrow, Ontario
Research Station 15623
Central Experiment Station, Centeno, Trinidad, West Indies 14820
Central Veterinary Laboratory, Weyhridge 15355 15473 1551B
Central Veterinary Laboratory, Weyhridge, England 15426
Chas. Pfizer And Co., Inc., Terre Haute, Ind. 15442
Chile Ministry of Agriculture, Santiago 1500B
Citrus Experiment Station
University Of California, Riverside 15689
Clemson College, Charleston, S. C.
Truck Experiment Station 151B3
Clemson University, Clemson, S.C.
Dept. Of Botany And Bacteriology 15006
College Of Science, Nagpur, India
Dept. Of Zoology 14897
Colonel Nelson Swift Morris Research Foundation 15602
Colorada State University, Fort Collins
College Of Veterinary Medicine
Agricultural Experiment Station 15376
Colorado Agricultural Experiment Station, Fort Collins 15111
Colorado State University, Fort Collins 15DD0 15634
Colorado State University, Fort Collins
Agricultural Experiment Station
College Of Veterinary Medicine 15378
Colorado State University, Fort Collins
College Of Veterinary Medicine
Agricultural Experiment Station 15377 15392
Colorado State University, Fort Collins
Dept. Of Pathology And Bacteriology
Experiment Station 15454
Connecticut Agricultural Experiment Station, New Haven 15654 15660
Conselho Nacional de Pesquisas 15110
Cornell University
Dept. Of Entomology 14801 14819 14925 14932
Cornell University
Dept. of Entomology
Pesticide Residue Laboratory 15564
Cornell University
Dept. Of Plant Pathology 15151 15207
Cornell University, Ithaca
Esticide Residue Laboratory 15656
Cornell University, Ithaca, N. Y. 15D94 15624
Cornell University, Ithaca, N. Y.
Dept. Of Plant Pathology 15D82
Cornell University, Ithaca, N.Y. 15132
Cornell University, Ithaca, New York 15259
Cornell Dniversity, Ithaca, New York
Dept. of Food Science 15575
CSAV, Prague, Czechoslovakia
Institute Of Entomology
Dept. Of Insect Pathology 14911
Czechoslovak Academy Of Sciences, Prague
Institute Of Experimental Botany
Dept. Of Plant Pathology 14865
Delaware Agricultural Experiment Station, Newark
Department of Plant Pathology 15219
Deleware Agricultural Experiment Station, Newark
Dept. Of Plant Pathology 15029
Demler Farms, Anaheim, California 15342
Department Of Agronomy
University Of California, Davis 15120
Dept. Of Agriculture, Issimmee, Fla.
Laboratories Division 15359
Dept. Of Agriculture, New Zealand
Ruakura Animal Research Station 15354
Dept. Of Agriculture, Ottawa, Canada
Forest Biology Division
Research Branch 14853
Dept. Of Agriculture, Victoria, Australia 15198
Dept. Of Animal Diseases
University Of Connecticut, Storrs 15389
Dept. Of Botany And Plant Pathology
Oregon State Dniversity, Corvallis 15071
Dept. Of Microhiology
Ontario Agricultural College, Guelph, Canada 15496
Dept. Of Plant Pathology
University Of Kentucky 15D72
Dept. Of Plant Pathology And Botany
University Of Minnesota, St. Paul 15525
Dept. Of Veterinary Science
University Of Wisconsin 15288
Dept. Of Veterinary Science
Dniversity Of Wisconsin, Madison 15486
Depts. Of Plant Pathology And Pomology
New York State Agricultural Experiment Station, Geneva 15060
Dow Chemical Co., Lake Jackson, Texas 15515

Dow Chemical Company, Midland, Michigan
Biomechanisms Laboratory 15582
Dr. Salsbury's Laboratories, Charles City, Iowa
Research Division 15405
East African Veterinary Research Organization, Muguga, Kenya 15492
East Malling Research Station, Maidstone, England 15001
Eli Lilly And Co., Greenfield, Ind. 15321 15322
Entomology Laboratory, Guelph, Canada 14868
Everglades Experiment Station, Belle Glade, Fla. 15513
Faculty Of Agriculture, Shambat, Khartuum, Sudan 15274
Farm Chemicals 15692
Fitzsimons General Hospital, Denver, Colo.
U. S. Army Medical Research And Nutritional Laboratory 15298
Florid Agricultural Experiment Station, Gainesville
Dept. Of Veterinary Science 15304
Florida Agricultural Experiment Station, Leesburg
Watermelon And Grape Investigations Laboratory 15168
Florida Dept. Of Agriculture, Kissimmee
Animal Disease Diagnostic Laboratory 15682
Food and Agriculture Organization of the United Nations 15350
Fordham University
University Biology Dept. 14938
Forest Biology Laboratory, Truro, N. S., Canada 14811
Forest Insect And Disease Lab., Delaware, Ohio 15039
Forest Insect Laboratory, Sault Ste. Marie, Ontario, Canada 15214
Forest Research Laboratory, Fredericton, New Brunswick
Dept. Of Forestry And Rural Development 14844
Georgia Costal Plant Experiment Station, Tifton 15088
Georgia Experiment Station, Experiment
Department of Plant Pathology 15073
Georgia Experiment Station, Experiment, Ga.
Dept. Of Plant Pathology 15103
Georgia Mountain Experiment Station, Blairsville
Dept. Of Plant Pathology 15197
Gorgas Memorial Laboratory, Panama 14899
Guinobatan Experiment Station, Philippines 15156
Harvard School Of Public Health
Dept. Of Tropical Public Health 14959
Hebrew University, Jerusalem, Rehovot, Israel
Faculty Of Agriculture
Dept. Of Animal Hygiene And Poultry Science 15430
Hebrew University, Rehovot, Israel
Faculty Of Agriculture 15431
Home State Farm Publications, Cleveland, Ohio 15694
Hooker Chemical Corporation, Niagara Falls, New York 15670
Horses
Livestock Diseases
Nematodes
Trichostrongylus Axei 15400
Houghton Poultry Research Station, Houghton, Huntingdon 15370
Humble Oil And Refining Company, Houston, Texas 15663
Illinois Natural History Survey, Urbana 14838
Indian Agricultural Research Institute, New Delhi
Division of Mycology and Plant Pathology 15159
Insect Pathology Research Institute, Sault Ste. Marie, Ont. 14862
Institut Fuer Biologische Schaedlingshekaempfung, Darmstadt
Biologische Bundesanstalt Fuer Land-und Forstwirtschaft 14894
Institute Of Legal Medicine, Porto, Portugal
Laboratory Of Toxicology 15579
Institute Of Zootechnics In Poland, Cracow
Sericultural Breeding Dept. 14885
Instituto Venezolano De Investigaciones Cientificas, Caracas
Departamento De Virologia 14860
Iowa State University Of Science And Technology, Ames
College Of Veterinary Medicine
Veterinary Medical Research Institute 15474
Iowa State University, Ames
Dept. Of Zoology And Entomology 14971 15234
Jamaica Ministry of Agriculture and Lands, Hope 15106
Kansas Agricultural Experiment Station, Hays
Fort Hays Branch 15503
Kansas State University, Manhattan
Dept. Of Botany And Plant Pathology 15047
Kenya Forest Dept. 15058
Kimber Farms, Inc., Niles, California 15459
Laboratory For Research On Insecticides, Wageningen, Neth. 14891
Laboratory Of Forest Biology, Calgary, Canada 14951
Lake County Mosquito Abatement District 15239
Latrobe University
School of Biological Sciences 14931
Loma Linda University
Dept. Of Microbiology 14839
Louisiana Agricultural Experiment Station, Baton Rouge 15233
Louisiana Agricultural Experiment Station, Homer
North Louisiana Hill Farm Experiment Station 15050
Louisiana State University 14871 15178
Louisiana State University
Dept. Of Entomology 14807 14816 14869
Louisiana State University,
Agricultural Experiment Station
Sweetpotato Research Center 15014
Louisiana State University, Baton Rouge 15123 15644 15664
Louisiana State University, Baton Rouge
Agricultural Experiment Station
Dept. Of Veterinay Science 15687
Louisiana State University, Baton Rouge,
College Of Agriculture
Dept. Of Veterinary Science 15461
Louisiana State University, Baton Rouge
Dept. Of Plant Pathology 15262
Louisiana Wild Life And Fisheries Commission, Monroe 15542
Massachusetts Agricultural Experiment Station, Amherst
Dept. Of Veterinary Science 15334
May And Baker Ltd.
Veterinary Research Division 15402
Merck And Company, Inc, Rahway, N J 15675
Michigan State Oniversity
Dept. Of Entomology 14879 14958
Michigan State University, East Lansing 14876
Michigan State University, East Lansing
Department of Botany and Plant Pathology 15026 15105
Michigan State University, East Lansing
Dept. Of Entomology 14864
Ministerio De Agricultura, Guatemala, C.A. 15169
Mississippi State Plant Board, State College 15027
Montana State College, Bozeman 15649
Nagoya University, Nagoya, Japan
Faculty Of Agriculture
Plant Pathology Laboratory 15056
National And University Institute Of Agriculture, Rehovot
Dept. Of Plant Pathology 15166
National Animal Disease Laboratory, Ames 15360
National Pest Control Association, Elizabeth, N.J. 14927
National Oniversity, Montevideo, Urugnay
Veterinary College
Dept. Of Poultry Husbandry 15478
National-University Inst. Of Agriculture, Rehovot, Israel 15209 15210
New Jersey Agricultural Experiment Station 15030
New Jersey Agricultural Experiment Station, New Brunswick 15031 15522
New Mexico State University, Oniversity Park
Dept. Of Poultry Husbandry 15367
New York State Agricultural Experiment Station, Geneva 14960 15142
New York State Dept. Of Health, Albany
Division Of Laboratories And Research 15293
New York State Veterinary College, Eastport, Long Island
Duck Disease Research Laboratory
Dept. Of Pathology And Bacteriology 15356
New York State Veterinary College, Ithaca
Dept. Of Avian Diseases 15365
New York State Veterinary College, Ithaca, N. Y.
Dept. Of Pathology And Bacteriology 15331 15362 15363 15364 15429 15441
New York State Veterinary College, Kingston
Branch Laboratory 15340
Nippon Institue For Biological Scene, Tokyo, Japan 15475
Nippon Institute For Biological Science, Tokyo, Japan 15476
North Carolina State College, Raleigh 14981
North Carolina State College, Raleigh
Dept. Of Plant Pathology 15257
North Carolina State College, Raleigh, N. C.
Dept. Of Poultry Science 15344
North Carolina State Of University Of No. Carolina, Raleigh 15630
North Central Regional Cooperative Research Project
Investigation on Oak Wilt 15154
North Dakota Agricultural Experiment Station, Fargo 14949
Ohio Agricultural Experiment Station, Wooster 15220
Ohio Agricultural Experiment Station, Wooster
Dept. Of Botany And Plant Pathology 15107
Ohio Agricultural Experiment Station, Wooster
Dept. Of Veterinary Science 15325
Ohio State University 15016
Ohio State University
Dept. Of Zoology And Entomology 14900
Ohio State University, Columbus
Dept. Of Veterinary Pathology 15375
Oklahoma Agricultural Experiment Station 15013
Oklahoma Agricultural Experiment Station, Stillwater 15012

Oklahoma State University, Stillwater
Dept. Of Physiology And Pharmacology 153D0
Ontario Agricultural College, Guelph, Ont., Canada
Dept) Of Microbiology 15497
Ontario Veterinary College, Guelph
Dept. Of Anatomy 15294
Ontario Veterinary College, Guelph
Dept. Of Physiological Sciences 15574
Ontario Veterinary College, Guelph, Canada
Dept. Of Pathology And Bacteriology 1548D
Ontario Veterinary College, Guelph, Ont., Canada
Dept. Of Pathology And Bacteriology 15412
Oregon Agricultural Experiment Station, Corvallis
Dept. Of Agricultural Chemistry 15560
Oregon State College
Entomology Dept. 15250
Oregon State College, Corvallis
Dept. Of Botany And Plant Pathology 15035
Oregon State University 15633
Oregon State University, Corvallis
Agricultural Experiment Station
Dept. Of Veterinary Medicine 15395
Oxford University
Commonwealth Forestry Institute
Insect Pathology Unit 14B89
Pan American Foot-and-Mouth Disease Center, Bio de Janeiro 15498 15499
Pennsylvania Agricultural Experiment Station
Dept. Of Botany And Plant Pathology 15195
Pennsylvania State University 15563
Pennsylvania State University, University Park 15372 15638
Pfizer Therapeutic Institute, Maywood, N.J.
Parasitology Laboratory 15403
Philips-Duphar (n.v.)
Economic And Market Research Department 15695
Plum Island Animal Disease Laboratory, Greenport, N. Y. 15490
Punjab University, Chandigarh, India 15622
Purdue University
Agricultural Experiment Station 15065
Purdue University
School of Veterinary Science and Medicine
Department of Physiology and Pharmcology 15455
Purdue University, Lafayette, Ind. 14995
Purdue University, Lafayette, Ind.
Dept. Of Animal Science 15290
Purdue University, Lafayette, Ind.
Dept. Of Botany And Plant Pathology 15618
Purdue University, Lafayette, Ind.
Dept. Of Entomology 1504B 15200
Regional Research Centre (oilseeds And Millets), Kanpur 15085
Roscoe B. Jackson Memorial Laboratory, Bar Barbor, Me. 153B6
Rothamsted Experimental Station, Harpenden, England 14B55 14905
Rowett Research Institute, Bucksburn, Aberdeen 15672
Royal Veterinary College, London, England
Dept. Of Pathology 15345
Rutgers - The State University, New Brunswick, N.J. 15109
Rutgers State University 14907
Rutgers University, New Brunswick, N. J. 15265
San Jose State College, Calif. 14893
Seattle University 14821
Sericultural Experiment Station, Suginami-ku, Tokyo, Japan 14850
South Illinois University, Carbondale
Dept. Of Plant Industries 15248
Stanford Research Institute, Menlo Park, California
Life Sciences Division 14954
State Dept. Of Agriculture, Sacramento, California
Division Of Animal Industry
Bureau Of Livestock Disease Control 15470
State University Of New York, Stony Brook
Dept. Of Biological Sciences 14870
State University Of South Dakota, Vermillion
School Of Medicine
Dept. Of Microbiology And Public Health 15436
Stauffer Chemical Co., Mountain View, Calif.
Biological Research Center 15662 15684
Swedish Plant Protection Institute 15144
Tea Research Institute, Talawakele, Ceylon 15095
Tennessee Agricultural Experiment Station, Knoxville 15046
Texas Agricultural Experiment Station 15161
Texas Agricultural Experiment Station, College Station
Dept. Of Veterinary Microbiology 15413
Texas Agricultural Experiment Station, Welaco 15237
The Pennsylvania State University
Veterinary Science Dept. 15373
The Pennsylvania State University, Arendtsville
Fruit Research Laboratory 15223
The Rockefellar Foundation, Calle Londres, Mexico 1513D
The Rowett Research Institute, Buckshern, Aberdeen 15659
The Wellcome Research Laboratories, Beckenham, Kent 15434
Tropical Pesticides Research Institute, Arusha, Tanzania 15081
U. S. Army Chemical Corps, Fort Detrick, Md.
Biological Laboratories 15019
U. S. Department of Agriculture
Forest Service
Institute of Forest Genetics, Rhinelander, Wisconsin 15643
U. S. Department of Health, Education and Welfare
Public Health Service
Bureau of State Services (environmental Health)
Office of Pesticides 15554
U. S. Dept Of Agriculture
Agricultural Research Service
Crops Research Division 15097
U. S. Dept. Of Agriculture 15D52
U. S. Dept. Of Agriculture
Agricultural Research Service
Crops Research Division 15070 15129
U. S. Dept. Of Agriculture
Agricultural Research Service
Crops Research Division
University Of Minnesota, St. Paul 15201
U. S. Dept. Of Agriculture
Agricultural Research Service
Crops Research Service 15063
U. S. Dept. Of Agriculture
Agricultural Research Service
Plant Quarantine Division
Plant Importations Branch 15255
U. S. Dept. Of Agriculture
Crops Research Division 15087
U. S. Dept. Of Agriculture Research Station, Salinas, Calif. 15D43
U. S. Dept. Of Agriculture, Ames, Iowa
Agricultural Research Service
Animal Disease Eradication Division
Leptospirosis Unit 15337
U. S. Dept. Of Agriculture, Ankeny, Iowa
Agricultural Research Service
Entomology Research Division 14939
U. S. Dept. Of Agriculture, Asheville, N. C.
Forest Service
Southeastern Forest Experiment Station
Division Of Forest Disease Research 15078
U. S. Dept. Of Agriculture, Beltsville, Md
Agricultural Research Service
Animal Disease And Parasite Research Division
National Animal Disease Laboratory 15371
U. S. Dept. Of Agriculture, Beltsville, Md. 149D1 15186 15189 15215 15218
U. S. Dept. Of Agriculture, Beltsville, Md.
Agricultural Marketing Service
Market Quality Research Division 1518B
U. S. Dept. Of Agriculture, Beltsville, Md.
Agricultural Research Service 15D93
U. S. Dept. Of Agriculture, Beltsville, Md.
Agricultural Research Service
Animal Disease And Parasite Research Division
Bacterial And Mycotic Diseases Section 15382
U. S. Dept. Of Agriculture, Beltsville, Md.
Agricultural Research Service
Animal Disease And Parasite Research Division
National Animal Disease Laboratory 15381
U. S. Dept. Of Agriculture, Beltsville, Md.
Agricultural Research Service
Crops Research Division 15004 15146 15150 15174 15180
U. S. Dept. Of Agriculture, Beltsville, Md.
Agricultural Research Service
Parasite Research Division 15315
U. S. Dept. Of Agriculture, Beltsville, Md.
Crops Research Division
Plant Virology Laboratory 15175
U. S. Dept. Of Agriculture, Davis, California
Agricultural Research Service
Crops Research Division 15202
U. S. Dept. Of Agriculture, Experiment, Ga.
Agricultural Research Service
Crops Research Division 15191
U. S. Dept. Of Agriculture, Greenport, Long Island, N. Y.
Agricultural Research Service
Animal Disease And Parasite Research Division
Plum Island Animal Disease Laboratory 15352
U. S. Dept. Of Agriculture, Greenport, N. Y.
Agricultural Research Service
Animal Disease And Parasite Research Division
Plum Island Animal Disease Laboratory 15308 15428

U. S. Dept. Of Agriculture, Gulfport, Miss.
Forest Service
Southern Forest Experiment Station
Institute Of Forest Genetics 15D90
U. S. Dept. Of Agriculture, Mayaguez, Puerto Rico
Agricultural Research Service
Federal Experiment Station 15D22 15023
U. S. Dept. Of Agriculture, N. C. State Coll., Raleigh
Agricultural Research Service
Crops Research Division 15280
U. S. Dept. Of Agricnlture, St. Paul
University Of Minnesota
Agricultural Research Service 15D55
U. S. Dept. Of Agriculture, Stuttgart, Ark.
Agricultnral Research Service
Crops Research Division 15646
U. S. Dept. Of Agriculture, Wenatchee, Wash.
Agricultural Research Service
Crops Research Branch 15099
U. S. Forest Service
Southeastern Forest Experiment Station
Athens Research Center 15269
U.S. Department of Agriculture
Agricultural Research Service 15481
U.S. Department of Agriculture
Forest Service
Pacific Northwest Forest and Range Experiment Station 15539
U.s. Department of Agriculture, Beltsville
Agricultural Research Service
Crops Research Division 15148
D.s. Department Of Agriculture, Beltsville, Md.
Agricultural Research Service
Animal Health Division 15658
U.s. Department Of Agriculture, Beltsville, Md.
Agricultural Research Service
Crops Research Division 15567
U.s. Department of Agriculture, Corvallis, Oregon
Forest Service
Pacific Northwest Forest and Range Experiment Station 15275
U.s. Department of Agriculture, Gulfport
Plant Pest Control Division 15561
U.S. Department of Agriculture, Gulfport, Mississippi
Agricultural Research Service
Plant Pest Control Monitoring Laboratory 15584
U.s. Department Of Agriculture, Kerrville, Texas
Agricultural Research Service
Entomology Research Division 15565
U.s. Department of Agriculture, Moscow, Idaho
Forest Service
Intermountain Forest and Range Experiment Station
Forest Sciences Laboratory 15283
D.s. Department of Agriculture, Ogden, Utah
Forest Service
Intermountain Forest and Range Experiment Station 15153
U.s. Department of Agriculture, Salinas, California
Agricultural Research Service
Crops Research Division 15688
U.s. Department Of Agriculture, State College, Miss.
Agricultural Research Service
Entomology Research Division
Boll Weevil Research Laboratory 15637
U.s. Department of Agriculture, University Park, Pennsylvan
Agricultural Research Service
Crops Research Division 15DR6
U.S. Department of Health, Education and Welfare, Baton R
Federal Water Pollution Control Administration
Lower Mississippi River Technical Assistance Project 15546
U.s. Department of Health, Education and Welfare, Cincinna
Federal Water Pollution Control Administration
Basic and Applied Sciences Branch
Robert A. Taft Sanitary Engineering Center 15553
U.S. Department of Interior
Fish and Wildlife Service
Bureau of Commercial Fisheries 155R5
U.s. Dept. Agriculture
Agricultural Research Division
Crops Research Division 15114
U.s. Dept. of Agriculture
Agricultural Research Service
Crops Research Division 15053
U.S. Dept. Of Agriculture
Agricultural Research Service
Entomolcgy Research Division 14R17 14818 14R47 14R73 14948 14967 14984 1508D 15238 15240 15247 15253 15502
U.S. Dept. Of Agriculture
Forest Service
Lake States Forest Experiment Station 14804
D.S. Dept. Of Agriculture
Plant Pest Control Division
Survey And Detection Operations 14991 15231 15232 15557
U.s. Dept. of Agricultnre, Ames, Iowa
Agricultural Research Service
Animal Disease and Parasite Research Division
National Animal Disease Laboratory 15437
U.S. Dept. Of Agriculture, Ames, Iowa
Agricultural Research Service
Crops Research Division 15D45
U.S. Dept. Of Agricultnre, Ankeny, Iowa
Entomology Research Division 14940
U.S. Dept. Of Agriculture, Beltsville, Md.
Agricultural Research Service
Crops Research Division 15128
U.S. Dept. Of Agriculture, Beltsville, Md.
Agricultural Research Service
Entomology Research Division 14849 14R96 14913 14922 14923
D.S. Dept. Of Agriculture, Beltsville, Md.
Agricultural Research Service
Entomology Research Division
Agricultural Research Center 14952
U.S. Dept. Of Agricnlture, Brownsville, Tex.
Agricultural Research Division
Entomology Research Division 14880
U.S. Dept. Of Agriculture, Brownsville, Tex.
Agricultnral Research Service
Entomology Research Division 148R4 14895
U.S. Dept. Of Agricultnre, Clemson, S.C.
Agricultural Research Service
Crops Research Division 15042
U.S. Dept. Of Agriculture, Corvallis, Ore.
Agricultural Research Service
Entomology Research Division 15194
U.S. Dept. Of Agricnlture, Davis, Calif.
Agricultural Research Service
Crops Research Division 15155
D.S. Dept. Of Agriculture, Delaware, Ohio
Forest Service
Central States Forest Experiment Station 14990
D.S. Dept. Of Agriculture, Hyattsville, Md.
Agricultural Research Service
Animal Health Division 15452
D.s. Dept. of Agricultnre, Kerrville, Texas
Agricultural Research Service
Animal Disease and Parasite Research Division
Toxicological Investigations Laboratory 15609
U.S. Dept. Of Agricnlture, Logan, Utah
Agricultural Research Service
Crops Research Division 15222
U.s. Dept. of Agricnlture, Logan, Utah
Agricultural Research Service
Crops Research Division
Animal Disease and Parasite Research Division 15494
U.S. Dept. Of Agricnlture, Luhbock, Tex.
Agricultural Research Service
Crops Research Division 15266
U.S. Dept. Of Agriculture, Madison, Wis.
Forest Service
Forest Products Laboratory 15D44
U.S. Dept. Of Agricnlture, Riverside, Calif.
Agricultural Research Service
Entomology Research Division 14883
U.S. Dept. Of Agriculture, Stoneville, Miss.
Agricultnral Research Service
Crops Research Division 1515R
U.s. Dept. Of Agriculture, Washington, D.c.
Agricultural Research Service
Entomology Research Division 15286
D.S. Dept. Of Health, Education, And Welfare
D.S. Public Health Service, Hamilton, Mont.
National Institutes Of Health
National Institute Of Allergy And Infectious Diseases 15679
U.S. Dept. Of The Navy, Washington, D.C.
Bureau Of Medicine And Surgery 1482R
U.S. Food and Drug Administration 15482 15483 15484 15586 155R7 15588 15589 1559D 15591 15592 15593 15594 15595 15596 15597 15598
U.s. Food And Drug Administration
Division Of Food Chemistry 15661
U.s. Food And Drug Administration
Division Of Microbiology 15534 15537
D.s. Food And Drug Administration, Detroit, Michigan 15562
U.s. Food And Drug Administration, Minneapolis, Minn. 15550
U.s. Food And Drug Administration, Washington, D.C. 15571
U.s. Food And Drug Administration, Washington, D.C.
Division Of Food Chemistry 15577 15601 15657

U.S. Food And Drug Administration, Washington, D.C.
Division Of Food Standards And Additives 15558
U.S. Food and Drug Association 15599
U.S. Livestock Sanitary Association 15485
U.S. Public Health Service
Bureau of State Services 15611
U.S. Public Health Service, Atlanta
Communicable Disease Center 14983
U.S. Public Health Service, Atlanta
Communicable Disease Center
Technology Branch
Toxicology Section 15606
U.S. Public Health Service, Cincinnati
Robert A. Taft Sanitary Engineering Center
Food Chemistry Unit 15600
U.S. Public Health Service, Perrine, Florida
Pesticides Program
Pesticides Research Laboratory 15674
U.S. Public Health Service, Savannah
Communicable Disease Center 15555
U.S. Public Health Service, Washington, D.C.
Environmental Health
Bureau of State Services 15578
Unilever Research Laboratory, Vlaardingen, Netherlands 15292
Union Carbide Research Station, Clayton, N. C. 15135 15136
United Fruit Co., Norwood, Mass.
Central Research Laboratories 15117
Univeristy Of California, Riverside
Dept. Of Nematology 15272
Universidad de Chile, Santiago de Chile
Facultad de Agronomia 15145
University Of Adelaide
Waite Institute
Dept. Of Plant Pathology 15049
University Of Adelaide, South Australia
Waite Agricultural Research Institute
Dept. Of Plant Pathology 15205
University Of Arizona 14996 14997
University of Arizona
Dept. of Entomology 14845
University Of Arkansas
Dept. Of Entomology 14815
University Of Arkansas
Dept. Of Horticulture And Forestry 15127
University of Arkansas, Fayetteville
Dept. of Animal Sciences 15379
University of Birmingham
Department of Biochemistry 14914
University Of California, Berkeley 14878 14898 15037
15059 15089 15171 15190 15208
University Of California, Berkeley
Dept. Of Biological Control 15690
University Of California, Berkeley
Dept. Of Insect Pathology 14964
University Of California, Berkeley
Dept. Of Plant Pathology 15062 15141 15216
University Of California, Berkeley
Division Of Invertebrate Pathology 14935
University Of California, Berkeley
School Of Public Health
Division Of Epidemiology 14837
University Of California, Davis 14843 15079 15177
University Of California, Davis
Dept. Of Botany 15277
University Of California, Davis
Dept. Of Nematology 15260
University Of California, Davis
Dept. Of Plant Pathology 15024 15147
University Of California, Davis
Dept. Of Pomology 15018
University Of California, Davis
Residue Research Laboratory 14930
University Of California, Davis
School Of Veterinary Medicine 15314 15319 15320
15432 15433 15448 15449 15450 15487 15493
University Of California, Davis
School Of Veterinary Medicine
Dept. Of Avian Medicine 15425
University Of California, Davis
School Of Veterinary Medicine
Dept. Of Clinical Pathology 15299
University Of California, Los Angeles 15507
University Of California, Los Angeles
Dept. Of Plant Pathology 15669
University Of California, Los Angeles
Dept. Of Zoology 14924 14968
University Of California, Riverside 15138
University Of California, Riverside
Citrus Experiment Station 14978 15573
University Of California, Riverside
Citrus Experiment Station
Dept. Of Biological Control 15224
University of California, Riverside
Dept. of Biological Control 14832
University Of California, Riverside
Dept. Of Entomology 14881 14882
University Of California, Riverside
Dept. Of Horticultural Science 15279
University Of California, Riverside
Dept. Of Horticulture 15528
University Of California, Riverside
Dept. Of Plant Pathology 15021 15203
University Of California, Riverside
Division Of Life Sciences 14969
University Of California, Riverside
Citrus Research Center 14977
University Of Cambridge
School Of Veterinary Medicine
Dept. Of Animal Pathology 15327 15328 15399
University Of Colorado, Denver
School Of Medicine
Dept. Of Pediatrics 15415
University Of Connecticut
Dept. Of Zoology And Entomology 14840
University Of Connecticut, Storrs
Storrs Agricultural Experiment Station
Dept. Of Animal Diseases 15301
University Of Connecticut, Storrs
Agricultural Experiment Station
Dept. Of Animal Diseases 15333
University Of Connecticut, Storrs
Dept. Of Animal Diseases 15339 15388 15512 15680
University Of Connecticut, Storrs
Storrs (Connecticut) Agricultural Experiment Station
Dept. Of Animal Diseases 15332
University Of Delaware, Newark 15010
University Of Delaware, Newark
Dept. Of Animal And Poultry Science 15346
University of Edinburgh
Royal School of Veterinary Studies
Dept. of Veterinary Bacteriology and Poultry Diseases
15368
University Of Florida
Department Of Entomology 15268
University of Florida
Department of Veterinary Science 15410
University Of Florida
Dept. Of Zoology 14966
University Of Florida
Plant Pathology
Plant Virus Laboratory 15028
University Of Florida, Belle Glade
Everglades Experiment Station 15530 15683
University Of Florida, Gainesville 15040
University Of Florida, Gainesville
Dept. Of Animal Husbandry And Nutrition 15297
University Of Florida, Gainesville
Dept. Of Plant Pathology 15115
University Of Florida, Gainesville
Dept. Of Veterinary Science 15309 15488
University Of Georgia
Dept. Of Entomology 14826
University Of Georgia, Athens
Department Of Plant Pathology And Plant Breeding 15639
University Of Glasgow, Scotland
Bacteriology Dept. 14929
University Of Glasgow, Scotland
Veterinary School 15391
University Of Guelph
Dept. Of Zoology 14902
University Of Hawaii
Dept. Of Entomology 14963
University Of Idaho 15068 15213
University Of Idaho, Moscow 15647
University Of Idaho, Moscow
Agricultural Experiment Station 15074 15075
University Of Idaho, Parma
Branch Experiment Station 15282
University Of Illinois
Botany Dept. 15179
University of Illinois
College of Veterinary Medicine
Department of Veterinary Research 15435
University Of Illinois
Dept. Of Entomology 14874
University Of Illinois, Urbana 15173 15182
University Of Illinois, Urbana
College Of Veterinary Medicine
Agricultural Experiment Station 15387
University Of Illinois, Urbana

College Of Veterinary Medicine
Dept. Of Pathology And Hygiene 15310 15398 15417 15453
University Of Illinois, Urbana
College Of Veterinary Medicine
Dept. Of Veterinary Pathology And Hygiene
Agricultural Experiment Station 15302
University Of Kentucky, Lexington 15038
University Of Maine, Orono 15635
University Of Maine, Orono
Animal Pathology Dept. 15691
University Of Maine, Orono
Dept. Of Animal Pathology 15500 15678
University Of Manitoba, Canada
Dept. Of Entomology 14943
University Of Maryland
Dept. Of Botany 15206
University Of Maryland, College Park
Dept. Of Microbiology 15384
University Of Massach Setts, Amherst
Dept. Of Entomology And Plant Pathology
Shade Tree Laboratories 15626
University of Massachusetts 15165
University Of Massachusetts
Dept. Of Veterinary Science
Eaton Laboratories, Norwich, N. Y. 15462
University Of Massachusetts, Amherst
Dept. Of Veterinary Science 15335 15336 15421 15422 15463
University Of Michigan
Dept. Of Botany 15066
University Of Minnesota
Dept Of Plant Pathology And Botany 15160
University Of Minnesota
Dept. Of Biology 15229
University Of Minnesota
Dept. Of Entomology And Economic Zoology 14942
University Of Minnesota
Dept. Of Entomology, Fisheries, And Wildlife 15284 15285
University Of Minnesota
Dept. Of Soil Service 15613
University Of Minnesota
Institute Of Agriculture
Dept. Of Plant Pathology And Physiology 15524
University Of Minnesota, St. Paul 15011 15653
University Of Minnesota, St. Paul
College Of Veterinary Medicine
Division Of Veterinary Anatomy 15306
University Of Missouri
School Of Medicine
Dept. Of Michrobiology 15317
University Of Missouri, Columbia 15134 15211 15655
University Of Nebraska
Dept. Of Plant Pathology 15172
University Of Nebraska, Lincoln 15625
University Of Nebraska, Lincoln
Dept. Of Plant Pathology 15034
University Of Nebraska, Lincoln
Plant Pathology Dept 15033
University Of New Hampshire
Dept. Of Animal Sciences 15358
University Of New Hampshire, Durham
Dept. Of Poultry Science 15491
University Of New South Wales
School Of Chemistry 14872
University of Newcastle
Department of Zoology 15254
University of North Carolina
North Carolina State University
Dept. of Entomology 14892
University Of Notre Dame
Dept. Of Biology 14972
University of Otago Medical School, Dunedin
New Zealand Medical Research Council
Hydatid Research Unit 15516
University Of Pennsylvania, Philadelphia
School Of Veterinary Medicine 15343 15427 15443 15472
University Of Pennsylvania, Philadelphia
School Of Veterinary Medicine
Laboratories Of Anatomy 15295
University Of Purdue
Purdue Agricultural Experiment Station 15627
University Of Rhode Island
Dept. Of Plant Pathology-entomology 15632
University Of Rhode Island
Rhode Island Agriculturural Experiment Station
Dept. Of Plant Pathology-entomology 15101
University Of San Marcos, Lima Peru
School Of Veterinary Medicine 15347
University Of Saskatchewan, Saskatoon
College Of Veterinary Medicine
Dept. Of Medicine And Surgery 15447
University Of Sydney, Australia
Dept. Of Agricnlture 15020
University Of Texas 14866
University Of Texas, Galveston
Medical Branch
Laboratory Of Medical Entomology 14920
University Of Tokyo
Faculty Of Agriculture 14852
University Of Tokyo, Japan
Faculty Of Agriculture
Dept. Of Veterinary Bacteriology 15419
University Of Western Ontario
Dept. Of Zoology 14970
University Of Wisconsin 14851 14858 15137
University Of Wisconsin
Dept. Of Entomology 14875 14886 14947
University Of Wisconsin, Madison 14833 15104 15118 15642 15650 15652
University Of Wisconsin, Madison
Department Of Entomology 14813
University Of Wisconsin, Madison
Dept. Of Plant Pathology 15084 15100 15187 15193 15273
University of Zambia
School of Natural Sciences 15641
University Sub P. O., London, Ontario, Canada
Canada Agriculture
Research Institute 15162
Upjohn Company, Kalamazoo, Michigan 15619
Utah State University
Dept. Of Botany 15217
Utsunomiya University, Japan
Faculty Of Agriculture
Dept. Of Zootechnical Science 15303
Veterinary Institute, Pulawy, Poland
Laboratory Of Swine Diseases 15307
Veterinary Research Laboratory, Kenya, Africa 15510
Victoria, Australia
Commonwealth Scientific And Indnstrial Research Organization
Division Of Animal Health 15439
Virginia Agricultural Experiment Station 14944
Virginia Department of Agriculture, Richmond 15124
Virginia Polytechnic Institute
Cooperative Extension Service 15225
Virginia Polytechnic Institute, Blacksburg
Dept. Of Veterinary Medicine 15287
Virginia Polytechnic Institute, Blacksburg
Dept. Of Veterinary Science
Virginia Agriculture Experiment Station 15353
Volcani Institute Of Agricultural Research
Division Of Fruit And Vegetable Storage 15069
Waite Agricultural Research Inst., Adelaide, South Australia
Dept. Of Plant Pathology 15648
Washington State Department of Agricultnre, Prosser
Research and Extension Center 15015
Washington State Dept. Of Agriculture, Prosser 15616
Washington State University 14806 15185
Washington State University
College Of Agriculture
Dept. Of Plant Pathology 15054
Washington State University
College of Veterinary Medicine
Washington Agricultural Experiment Stations
Dept. of Veterinary Microbiology 15420
Washington State University
Dept. Of Plant Pathology 15064
Washington State University
Irrigation Experiment Station, Prosser 15184
Washington State University
Western Washington Experiment Station 15057
Washington State University, Pullman 15077 15163
Washington State University, Pullman
Dept. Of Veterinary Science
Washington Agricultural Experiment Stations 15393
Washington State University, Wenatchee
Tree Fruit Experiment Station 15244
Wellcome Research Laboratories, Kent, England 15469
West Virginia University
Dept. Of Microbiology 14814
West Virginia University, Morgantown 15615 15620
West Virginia University, Wardensville
Dept. Of Animal And Veterinary Science
Reymann Memorial Farm 15383
Western Washington Experiment Station, Puyallup, Wash. 15394
Wisconsin State Dept. Of Agriculture
Wisconsin Animal Disease Diagnostic Laboratories 15408
Wisconsin State Dept. Of Agriculture

Wisconsin Animal Disease Diagnostic Laboratory 15409

☆ U.S. GOVERNMENT PRINTING OFFICE: 1968 0-300-987

U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

OFFICIAL BUSINESS

To stop mailing or to change your address send this sheet with new address to: Pesticide Information Center, National Agricultural Library, Washington, D.C. 20250

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE